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THIS WEEK'S NEWS

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MR. HERBERT MORRISON, M.P., has announced some details of arrangements for the Festival of Britain, 1951. Apart from the retention of the Shot Tower, the general clearing of the area between the County Hall and Waterloo Bridge and the construction of the new L.C.C. Concert Hall, new temporary footbridges, one across the river and the other across York-road from Waterloo Main Line, are to be built. 87

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ANSWERS BY EXPERTS on the Town and Country Planning Act, 1947, are given to some practical questions asked at a recent meeting of the Chartered Auctioneers' and Estate Agents' Institute. 103

ADDRESSING a meeting of the London Rotary Club, Mr. D. C. Burgess, M.I.O.B., President of the L.M.B.A., has pointed out that the first requirement for real co-operation within the industry is not, as often suggested, that operatives must co-operate with employers, but that "employers must first get down off their hobby horses and meet the operatives as fellow-men." 106

ARCHITECTURAL EDUCATION

THE statistical side of the MARS Group and Architectural Students' Association interim report on Architectural Education has been "audited" by the officers of the R.I.B.A. Board of Architectural Education. Their comments, painstakingly produced and slightly pained in tone, were published in the last issue of *The Builder*. It would seem that in certain instances the MARS Group figures were not fully authenticated, sometimes being based on assumed averages where further factual details could have been supplied. This is unfortunate, and as a result some conclusions have been made to appear unduly disturbing by being based on unintentional exaggerations. Thanks, however, to the Report, the Board has been stirred into making a timely statement on the situation with regard to numbers. With paragraphs 70 to 75 thus amended, the MARS Report, comprising 77 paragraphs in all, still forms a document of significance.

The Board rightly points out that, in the total number of "external" students that take the Final Examination in a year, due allowance should be made for those who sit more than once, either for the whole or for part of the examination. The salient point is that of those who qualify as Associates of the R.I.B.A., half do so through recognised schools and half as external examinees. Again, it appears that students in recognised schools are now outnumbered by those studying elsewhere by two (not three as asserted in the MARS Report) to one.

The MARS Report Summary of the numbers now studying who are expected to stay the course and take the final examination arrived at the following: About 4,500 at recognised schools, about 1,000 at unrecognised schools, and, what seemed most surprising of all, about 7,000 obtaining, by some means or other, individual training. The Board has adjusted the balance by including in the second instead of the third category some 2,000 students at "Facilities" schools and certain other groups. Of the third category, now reduced to about 5,000 students, just over 3,000 are known to be taking correspondence courses. This the Board appears to view with some complacency: it is explained that such students have no alternative legitimate means of organised study because they are out of reach of school facilities. The number whose methods of training are unknown is finally reduced by the Board to little over 1,700. This residue, it is said, allowing for unreported marriages and deaths, is "negligible"—surely a sudden plunge into the very world of unsupported assumption of which the MARS Committee has, by implication, been accused.

The over-all picture is thus adjusted, but the apparent weaknesses in the situation have not been removed. Attention has so far been focused on holes that may be picked in statistics rather than in dealing with the main implications of the Report. Recent papers on architectural education both at the R.I.B.A. and the A.A. have shown all too clearly the immense difficulty of moulding a recognised course to cover all that is required. To those taking a correspondence course the situation must seem almost hopeless, for although such a course can give sound instruction in building technique and professional practice, it is a very different matter when it comes to creative design and supplying the cultural background which sets the student on the right path to develop as an architect. If it is a fact that such large areas of the country are out of reach of the schools, it may be advisable to have more schools, smaller in size than the present number of larger ones; if the difficulty is one of finance, Government grants and awards may be brought in to help.

The fact that such a large proportion of the external examinees are regularly failed is an indication that too many students totally unsuited to the profession have been led to have their hopes raised. The examiners, all practising architects or architectural teachers of standing, wade laboriously through the portfolios not only of promising students but also of provincial "engineers" who hope to carry out large-scale constructional works under the umbrella of the R.I.B.A. or the Architects' Registration Council, old hands who can write specifications but who have neither knowledge nor thoughts above drain level, and others who similarly have little comprehension of the meaning of Architecture. To filter these off at an earlier stage is only possible where studies are organised.

The analysis of the general situation with regard to crowding in the profession is a good basis for further

investigation: can an equilibrium be achieved—between the number of architects and architectural assistants employed and the volume of work that can be carried by the building industry—by control which is more scientific and economical than the present rough-and-ready process of trial and error, with the survival of not necessarily the fittest? This problem, combined with that of quality of entry and equality of opportunity, still awaits much further study.

THREE YEARS OF PLANNING

THE movement towards Nationalisation of all activities, which characterises most of the operations of our present Government, must necessarily include the line of procedure for town-planning, and this is made clear in the recent issue from the Ministry of Town and Country Planning of their Circular No. 59 dealing with the methods to be adopted in preparing future plans.*

The circular is addressed to County Councils and those of County Boroughs, the authorities charged with the preparation of a complete co-ordinated scheme. The object of this circular is to provide: (1) A general statement on the nature of the obligation resting on local planning authorities to prepare plans within three years of the Appointed Day; (2) notes on the maps prescribed by the Regulations; and (3) notes on a number of matters in which authorities will be assisted by knowing the general views held by the Minister of Town and Country Planning.

The view that the work can be completed in three years, when the comprehensive character of the programme is appreciated, may be decidedly optimistic, and it is not surprising to find that some of the authorities concerned are making desperate efforts to increase their staffs of qualified planners, and even so it seems as if it will take some time before the work, as contemplated, can be effectively under way. Moreover, the indication that various local authorities will be expected to co-operate in harmonising schemes so as to bring them into one rational whole adds a further complication. There seems little doubt that the time will eventually have to be extended, as has just been done in the postponement to June 30 of the time limit for claims against the £300 million compensation fund.

The Councils are required to submit a basic map to the scale of one inch to the mile, but this is mainly to index the areas dealt with, as for town and other areas the prescribed scale is six inches to the mile, with details for roads and for acquisition to a scale of 1/2,500; together with these a written explanatory statement is required. It should be noted that the responsibility for all towns (other than county boroughs) rests primarily with the counties in which they lie, and that whatever views may be held locally, these must be dealt with by the County Council which represents the subsidiary bodies in all dealings with the Ministry. The aim is obviously to secure co-ordination over as wide an area as practicable, and it is assumed that the county can hold the balance between places competing for certain local activities. To do this reasonably well will require the formation of numerous unofficial committees and also the holding of joint meetings between the prescribed authorities.

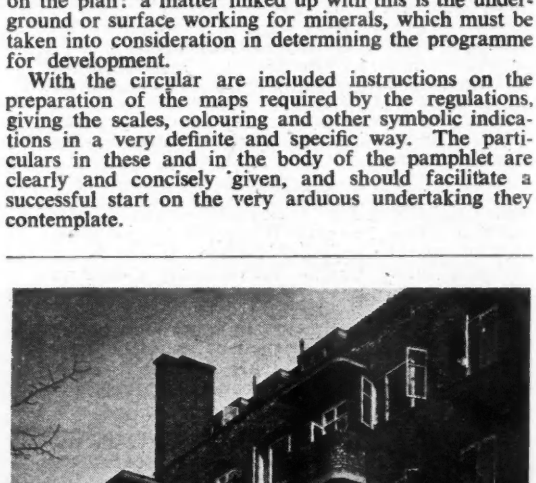
Some of the more important cases where these conditions occur are the Metropolis, the Midlands around Birmingham, and the Merseyside, where the representative County Councils will have to form joint bodies to determine the solution of problems affecting the area as a whole, as on these will depend many closely interwoven interests. If decisions cannot be mutually agreed, a final appeal to the Ministry will have to be resorted to, but this, of course, is less likely to give a satisfactory result than local agreement.

The circular does not claim to give exact instructions as to the presentation of schemes such as was done in the 1932 Act, but regards them as indicating on a broad basis the Planning Authorities' intentions as to the future use of land. Some of the proposals may be indicated in a manner rather more diagrammatic than precise, approximate locations for buildings and other features being shown by symbols; the main purpose of the maps being to provide a foundation to which details could be added later for areas needing treatment owing to eventual developments. The preparation of detailed schemes is not to be regarded as necessarily following, but rather to be a continuing process subject to review every five years or when special conditions may so demand. Taking this view, the Minister favours including more land rather than less, especially where there is a probability of development.

Some features of the circular seem to suggest that the undertaking envisaged is a general sketch plan for future guidance; it is definitely emphasised that specific areas should be defined for compulsory acquisition, designated as for the following purposes: (1) for the Government, local authority or statutory undertaker; (2) within or contiguous to a development site; (3) for the reason of security for a special purpose. It is regarded of importance that the stages by which it is contemplated to carry out a scheme should be indicated on the plan: a matter linked up with this is the underground or surface working for minerals, which must be taken into consideration in determining the programme for development.

With the circular are included instructions on the preparation of the maps required by the regulations, giving the scales, colouring and other symbolic indications in a very definite and specific way. The particulars in these and in the body of the pamphlet are clearly and concisely given, and should facilitate a successful start on the very arduous undertaking they contemplate.

* *Ministry of Town and Country Planning Circular No. 59.*—Statement on the preparation of development plans with an appendix containing notations for the prescribed maps. (H.M. Stationery Office, 1948, 6d. net.)



FLATS IN ST. EDMUND'S-TERRACE, LONDON: Howard Robertson, F.R.I.B.A., S.A.D.G. (Easton and Robertson), Architect. Mr. Howard Robertson's nomination as Royal Gold Medallist for 1949 was confirmed at a meeting of the R.I.B.A. Council on January 11.

NOTES AND NEWS

A Film on Planning.

THE principal character in the new C.O.I. film, "A Plan to Work On," is a town planner, and because town planning is an even more intricate business than crime detection he has been provided with a Dr. Watson in the form of a wife. The film has only run for a few minutes before the audience recognises her as the character with whom they must identify themselves. Her husband arrives home from a hard day's planning to be greeted by the question, "Is that you, Robert?" This is a good start. A woman who asks such an elementary question is capable of anything. She might even ask him about the new plan for Dunfermline on which he is working with an assistant. She does. "And will ye be able to do it all, just the two of ye?" she says. There is a slight pause in which the audience may bate its breath. Then comes the reply. He will need the assistance of the borough engineer.

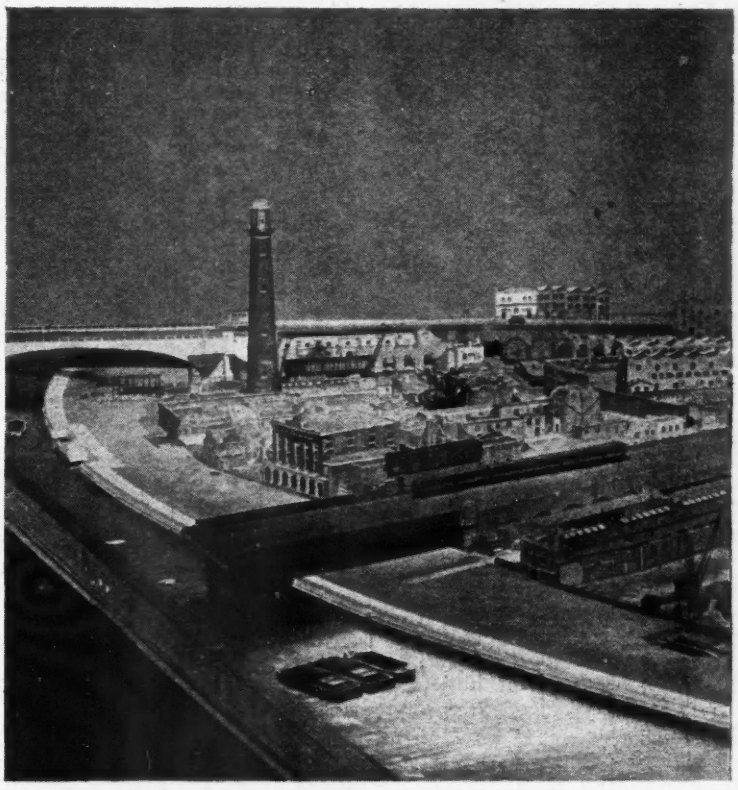
No doubt the audience is too engrossed by this time to realise that it is being educated. Or is it? It depends on the audience. According to the C.O.I., this is a specialist film for architects, builders and local authorities. However, it is by no means a technical film. Certainly it gives an historical survey of Dunfermline through the last nine hundred years, and points out that health, housing, schooling, work and recreation are being taken into consideration in the preparation of the new plan. But it is unlikely that the architect will learn a great deal from it, although it is obviously of value as a means of showing local authorities the problems that arise in planning. If the film had been made essentially for audiences composed of people directly concerned with town planning, the director could have dispensed with the popular touch. In fact, the C.O.I. intend to hire it out to youth centres, women's institutes and other organisations as well, and to include it in their mobile unit programmes. Their proposed audiences are less "specialised" than they suggest. In view of this, they must be complimented on producing a film of excellent quality which can help to increase public interest in a current problem of great importance.

South Bank Ceremony.

MR. HERBERT MORRISON, M.P., Lord President of the Council, began the work on the new South Bank river wall on Monday by starting a pile-driving hammer which drove the first steel sheet pile into the No. 1 cofferdam.

At the preliminary speech-making, Mr. Morrison said the first use of the site which the new wall would win from the river would be for the main national exhibition of the Festival of Britain, 1951. For that purpose the Shot Tower would be kept standing, the rest of the remaining buildings would be cleared, the great new London County Council Concert Hall would be built downstream of Hungerford Bridge, new temporary footbridges would bring people across the river from Charing Cross and across York-road from Waterloo Main Line, and new roundabouts at both ends of York-road would be provided for easier traffic circulation.

He added that arrangements were in hand between the L.C.C. and the councils of Lambeth and Southwark for a great spring-cleaning, tidying-up and brightening of the streets surrounding the area in time for 1951. "I hope that this task will be taken up with a will and with an energy which will astonish the world," said Mr. Morrison, "and that the lead which the people of Lambeth and Southwark are giving will be followed all over London—and, indeed, all over Britain."



THE SOUTH BANK. Seen above is a view of a model of the South Bank redevelopment scheme, showing the new river wall as it will be completed. Plans for the use of the site for the Festival of Britain, 1951, as outlined on Monday last by Mr. Herbert Morrison, are referred to on this page.

The new wall along the south bank of the river between Waterloo Bridge and the County Hall has been designed by the chief engineer for the London County Council, Mr. J. Rawlinson, who will be responsible for its erection. The council's architect, Mr. R. H. Matthew, has advised on architectural treatment. Richard Costain, Ltd., are the main contractors.

We understand that the new temporary footbridge over the river will be on the Westminster side of Hungerford Bridge. No details of the type of construction to be used are yet available, although it is expected they will be shortly.

The Brewery Lions.

THE smaller lion on the Belvedere-road entrance to the former Lion Brewery, which is to be demolished to make place for the Festival of Britain Exhibition, 1951, came down last week. This animal and its counterpart on the river side of the brewery are to be cleaned and prepared for the Festival. Scaffolding is now going up on the river front section of the brewery and the big lion will be hauled down, possibly next week.

A School in the Country.

IN his recent paper at the R.I.B.A., Professor R. Gordon Brown and, later, one or two of the speakers, raised the subject of the ideal location of an architectural school; in short, the relative merits of a town or country site. Mr. Gordon Brown appeared to be strongly in favour of country, others in favour of the town, but it may be that a curriculum which embraces both more nearly approaches the ideal. It is, incidentally, somewhat remarkable that the architectural quality of architectural school buildings is, generally speaking, so low, although it is heartening that so consistently high a standard of work is achieved in those buildings. The difficulties of a country school are obviously very great. The ideal solution, it has been put forward, might be something in the nature of a communal country school to which different urban schools can send their various classes for periods of training. There are four seasons to every year, and perhaps it could be arranged for pupils to visit the country school for a short period in each season. Whatever the merits of such a scheme, it would, if put into effect, call for a high degree of co-operation between the various schools participating. That, in itself, would not be without its advantages.

Ancient "Modern Art."

THE exhibition shown at the Academy Hall, Oxford-street, "40,000 Years of Modern Art"—was well worth a visit. Despite the title, however, the early Aurignacian cave paintings could hardly be called "modern," even at the time of their execution. Work such as this was produced by traditional craftsmen according to the beliefs of the time, and not in a spirit of revolutionary experiment. Although the cycle of art has turned back to work very similar in technique to this, the approach (we sincerely hope) is 40,000 years ahead.

Seen in this light, the exhibition was

somewhat disturbing; there is something almost comical about a man living 40,000 years ago, with possibly no forehead at all, producing art almost identical with that created to-day by one with the highest brow ever. However, art is frequently held to be a queer affair, and a visit to the Academy Hall provided some support for this view.

"Evolution in Architecture."

PROFESSOR H. O. CORFIATO'S lecture on "Evolution in Architecture," delivered at University College, London, in May, 1947, has now been published as a pamphlet (London: H. K. Lewis, price 3s. net). No more than 9,000 words in length, it is remarkable for its condensed thought and writing, taking us swiftly from the Book of Genesis to Frank Lloyd Wright, and showing an astonishingly intimate acquaintance with practical and æsthetic developments in between. Taking as a text Alberti's assertion that architecture must have a double aim, "commoditas et voluptas," Prof. Corfiato says truly that it is the "voluptas" added to the "commoditas" which differentiates the architect from the engineer. Developing the theme that changing taste is manifest at all times and all periods, he reaches the conclusion that after centuries of flowering "the mistress art is in danger of being no more mistress. . . . We are now more sensible to strange work than to beauty." Architecture is more "commoditas" than "voluptas"—in other words, more notable for its functionalism than for giving visual and spiritual pleasure. Professor Corfiato does not suggest how the balance is to be restored, but that it will have to be is obvious if architecture is to endure and flourish. Perhaps he will develop this theme for our benefit in a further lecture.

Sculpture for London Parks.

THE competition recently opened to members of the Royal Society of British Sculptors for a sculpture intended as a fountain to be placed in a formal garden in Victoria Park, East London, has been won by Mr. Edward Bainbridge-Copnall. His design has been approved by the Parks Committee of the L.C.C.

U.S.A. Furniture Competition Award.

A $5,000 first prize for storage furniture (cabinets) in an International Competition for Low-Cost Furniture, sponsored by the Museum of Modern Art, New York, has been won by Mr. Robin Day, F.S.I.A., of 33, Markham-square, S.W.3, and Mr. Clive Latimer, M.S.I.A., of Holly Court, Merton-lane, Highgate, N.6, from more than 3,000 international entries.

R.I.B.A. Diploma Discontinued.

THE Council of the R.I.B.A. have decided that their diploma in town planning shall be discontinued. The examination to be held in 1950, for which the closing application is January 1, 1950, will be the last examination qualifying for the R.I.B.A. diploma in town planning. It will be based on a revised syllabus and time-table which has been prepared and will be available for distribution in due course.

A special examination for candidates previously relegated under the existing syllabus in not more than two subjects will be held in 1950. Any candidate who fails, at that examination, to satisfy the examiners will be unable subsequently to qualify for the R.I.B.A. diploma.

Reinstatement of Guildhall.

THE City Lands Committee of the Corporation of London is asking the Common Council for authority to obtain from Sir Giles Gilbert Scott, O.M., R.A., a preliminary report on the reinstatement of Guildhall and the reconstruction of adjacent buildings at a fee of 1,500 guineas. This fee, together with fees amounting to £6,300 paid him in October, 1944, are to be merged in the commission of six per cent. on the cost of works if it is carried out. Before the war Sir Giles Gilbert Scott had been dealing with the question of reconstructing the various offices surrounding Guildhall itself, and the Court had actually approved some parts of the scheme to reconstruct offices abutting on Aldermanbury.

This model of a church, constructed with 1-in. slabs of Bath stone, has been made by ex-Government trainee stonemasons employed by Messrs. J. Bysouth, Ltd., masonry contractors, of Slough. The model, which is 4 ft. long and 2 ft. 6 in. wide, demonstrates the normal methods used by stonemasons in such work.

Society of Antiquaries Elections.

AT an ordinary meeting of the Society of Antiquaries of London, held on January 13, the following were among those elected to Fellowship: Mr. P. H. Winter, F.R.I.B.A.; Professor E. W. Tristram, A.R.C.A., Hon. D.Litt, Hon. A.R.I.B.A., and Mr. W. A. Eden, M.A., B.Arch., A.R.I.B.A.

Planning Appointment.

MR. ANTHONY M. CHITTY, M.A., F.R.I.B.A., A.M.T.P.I. (of Hening and Chitty, architects) has been appointed by Buckinghamshire County Council as consultant and will prepare development plans for the towns of Aylesbury and High Wycombe.

County Architect Appointed.

MR. J. CATCHPOLE has been appointed county architect to East Sussex County Council in succession to Mr. E. A. Verger. He is 40 years of age. At present he is county architect to the North Riding of Yorkshire County Council, having been appointed to that post in October, 1946. From 1937-1942 he was chief architectural assistant to the West Sussex County Council, and on his return from the Forces in 1945 he was appointed deputy county architect to the West Sussex County Council. He was elected A.R.I.B.A. in 1935.

Greensted Church, Ongar.

EXACTLY 100 years after major repairs were carried out in the nineteenth century an appeal has been launched for funds to repair the tower of St. Andrew's Church, Greensted, near Ongar, Essex, believed to be the oldest Anglo-Saxon wooden church.

The little church has long been an object of historic and antiquarian interest. The brick chancel was added in Tudor times, and the wooden tower towards the end of the seventeenth century. The tower has now to be substantially repaired at considerable cost, the wooden shingles forming its turret being worn out. The nave is formed of the half trunks of trees about a foot and a half in diameter, split and roughly hewn at each end to let them into a cill at the bottom and into a plank at the top, where they are fastened with wooden pegs. This is the whole of the original fabric now remaining entire, though much corroded and worn by long exposure to the weather. On the south side there are 16 trunks and two door posts, and on the north 21. (See "From *The Builder* of 1849" on facing page.)

Professional Announcements.

MR. T. S. TAIT and MR. GORDON TAIT have taken into partnership Mr. F. Kennedy Axten, A.I.A.A., Mr. E. A. Blade, A.R.I.B.A., Mr. J. H. Wallace, F.R.I.A.S., and Mr. C. Spencer Willmott. The firm will continue to practise under the name of Sir John Burnet, Tait and Partners, at 10, Bedford-square, London, W.C.1, and 44, Charlotte-square, Edinburgh.

MR. SYDNEY GREGSON, F.R.I.B.A., recently appointed County Architect to the Cornwall County Council, County Hall, Truro, would be pleased to receive trade catalogues, etc.

MR. F. W. MACKENZIE, L.R.I.B.A., F.I.A.A, has removed his office to 237/241, Regent-street, London, W.1. (Tel.: Regent 3900.)

MR. BASIL E. BRASSINGTON, F.I.A.S., quantity surveyor, 160, Edmund-street, Birmingham, 3, has recently opened a

branch office at 100, Upper Parliament-street, Nottingham (Telephone: 2723), where he will be pleased to receive trade catalogues, etc., particularly from local firms.

MR. THOMAS V. HUTCHINGS, quantity surveyor, has moved from 156, Camden High-street, to 22, Oakley-square, N.W.1.

FROM "THE BUILDER" OF 1849

Saturday, January 27, 1849.

THE ANCIENT CHURCH AT GREENSTEAD.—(*From a letter*). SIR,—I infer, from a paragraph in THE BUILDER, that a wrong impression has gone forth as regards the wooden church at Greenstead, namely, that it has been destroyed, or at least partially so. Now, Sir, that is not the fact, and if any person, having seen the outside of the timbers six months ago, could see them at the present time, they would scarcely be able to say, from their appearance, whether they had been removed or not . . .; the oak cills having been laid on the earth, with merely some rough flint put under them at intervals, had become so rotten as to let the upright timbers drop through, and had not the ends of the wall plates rested on the brickwork of the chancel, a great part of the nave must have fallen. It has been the particular wish of the rector, the Rev. Phillip Ray . . . and also of Mr. Wyatt, the architect, that every part of the old timbers should be preserved, and I have been careful to carry out those wishes . . . The church will be open for divine service about the middle of February next, when any who feel a veneration for the relics of bygone days will be able to see that this ancient structure has been preserved to the fullest extent possible.—James Barlow, Builder. Chipping Ongar, Essex.

COMING EVENTS

Tuesday, January 25.

THE INSTITUTE OF FUEL.—"Combined Heat and Power Supplies." Conference. Institution of Mechanical Engineers, Storey's Gate, S.W.1. 10 a.m. and 2 p.m.

Wednesday, January 26.

ARCHITECTURAL ASSOCIATION.—"As Far As Thought Can Reach," by Mr. R. Furneaux Jordan, F.R.I.B.A. 8 p.m.

NATIONAL FEDERATION OF BUILDING TRADES EMPLOYERS.—Dinner. Dorchester, Park-lane, W.1. 6.30 p.m.

THE INSTITUTE OF WELDING.—"The Sir William J. Larke Medal Paper." Institution of Civil Engineers, Great George-street, S.W.1. 6 p.m.

Thursday, January 27.

NATIONAL FEDERATION OF BUILDING TRADES EMPLOYERS.—A.G.M. Liverpool Victoria Building, Southampton-row, W.C.2. 10.30 a.m.

TIMBER DEVELOPMENT ASSOCIATION.—"Timber as an Engineering Material," by Mr. P. O. Reece, A.M.I.C.E., Fyvie Hall, Polytechnic, Regent-street, W.1. 7.15 p.m.

THE INSTITUTION OF STRUCTURAL ENGINEERS.—"The Single-storey Factory and the Rigid Frame," by Mr. F. R. Bullen, B.Sc. 11, Upper Belgrave-street, S.W.1. 6 p.m.

THE ROYAL SANITARY INSTITUTE.—"The Present Housing Problem—Is New Legislation Necessary?" Discussion to be opened by Mr. F. Binns Hartley. "The Scope of Care Work and Who Shall Undertake It," opened by Mr. G. Ramage, M.A. Town Hall, Wolverhampton. 10.15 p.m.

Friday, January 28.

THE FACULTY OF ARCHITECTS AND SURVEYORS AND THE FACULTY OF SURVEYORS OF ENGLAND (West London and Middlesex Branch).—Annual Dinner. Dorchester Hotel, Park-lane, W.1. 7.30 p.m.

Problems of Architectural Education

Professor Gordon Brown's Address to R.I.B.A.

PROFESSOR R. GORDON BROWN, who, as reported in *The Builder*, January 14, takes up his duties at the School of Architecture, Edinburgh University, on February 1, gave a talk on "Some Problems in Architectural Education" at a meeting of the Royal Institute of British Architects on January 11. MR. MICHAEL WATERHOUSE, M.C., P.R.I.B.A., was in the chair.

PROFESSOR GORDON BROWN began by making a plea for quality rather than quantity in architectural education, and said:—

If one accepts that we face considerable changes in education over the next ten years then the first major problem is to state clearly what we are trying to do. Ultimately, the object of all architectural education must be to produce buildings of fine quality. This fine quality in building can only spring from quality of mind which is not to be ensured by the quantity of work done but rather by careful selection and relation of subjects and by the influence of environment. Selection of subjects for study must also be related to the standard of student intake. Our education is therefore considerably affected by the secondary schools which produce our probationers.

Secondary education, like architectural education, is something about which it is difficult to generalise, but experience teaches one that applicants with the School Certificate—and shall we say, five credits—are, as a rule, pathetically unawakened to all matters concerned with design. Few of them have any general conception, even in the broadest outline, of the history of the arts in this country or in Europe.

This may be too gloomy a view, but I have no doubt that, if we wish to produce architects of real quality, we must be very much aware of the problems arising out of our intake and we must include general studies of the type undertaken in the University Schools.

At the moment, these parallel studies are dealt with under the heading of History in many schools. I think this is unfortunate and leads to a wrong emphasis, and possibly, in the long run, to reaction.

It should not be forgotten that among the many other qualities which the architect requires is that of robustness. It is a difficult quality to cultivate in the schools, if we maintain an artificial separation from the rest of the profession. I feel certain that we should re-establish a much closer link between the office and the school work and this can no doubt be done in different ways in different parts of the country and in different types of schools. It seems unnecessary to say how one considers it should be put into operation but I would say that everything possible should be done to give the student a real knowledge of office practice and procedure from the time he enters the profession.

One of the most important first-steps, if we are to re-define our aims, is to limit the size of the problem undertaken in the senior years of the schools. These large subjects, when they require detailed working drawings, make it imperative that we continue with the advanced technical and specialist lectures without which such problems cannot be done. Many of these more advanced technical studies have their place, I think, in post-graduate rather than undergraduate work.

I would like to ask the meeting whether they do not feel that it would be better to make detailed studies of far less ambitious subjects and expect our fifth-year students to be able to design in detail nothing larger than a medium-sized block of flats. At the same time, problems should be set involving much bigger schemes which would be a real exercise in imagination and logic but not exercises in advanced building technique. I may be wrong in this, but I believe that the average student cannot keep abreast of all aspects of modern technique. He is almost forced to neglect one part in order to spend adequate time on others.

The Schools and Post-Graduate Work.

In planning a course we must bear in mind the relationship between the architectural schools and post-graduate work.

The R.I.B.A. Prizes and Studentships provide one of the best means for post-graduate study. In addition, we should not neglect the valuable assistance which can be offered by the schools in a possible combination of teaching and research work. In this way, by combined teaching and research, there may be a chance of producing some of those books which we so badly need.

If we realise that an architect's education is not finished when he leaves the schools we ought to be able to produce men who have the makings of good architects and, at the same time, are useful assistants. One cannot ignore the fact that most of our students are going to be assistants for some time after leaving the schools.

Educational Technique.

I would like to go on now to consider educational technique. This follows a well-established form in most of the schools at the present time. It rests basically on subjects done in the studio related to the student's design experience and to the lecture syllabus. In this system the student designs a series of buildings which are progressively more involved and tend to become larger in size. It is a remarkably standard technique and its variations appear rather superficial and little influenced by experiments abroad or in other parallel studies at home.

I wish that we could have a special committee which would make careful analysis of all the information available on new techniques in education which might be applicable to architecture.

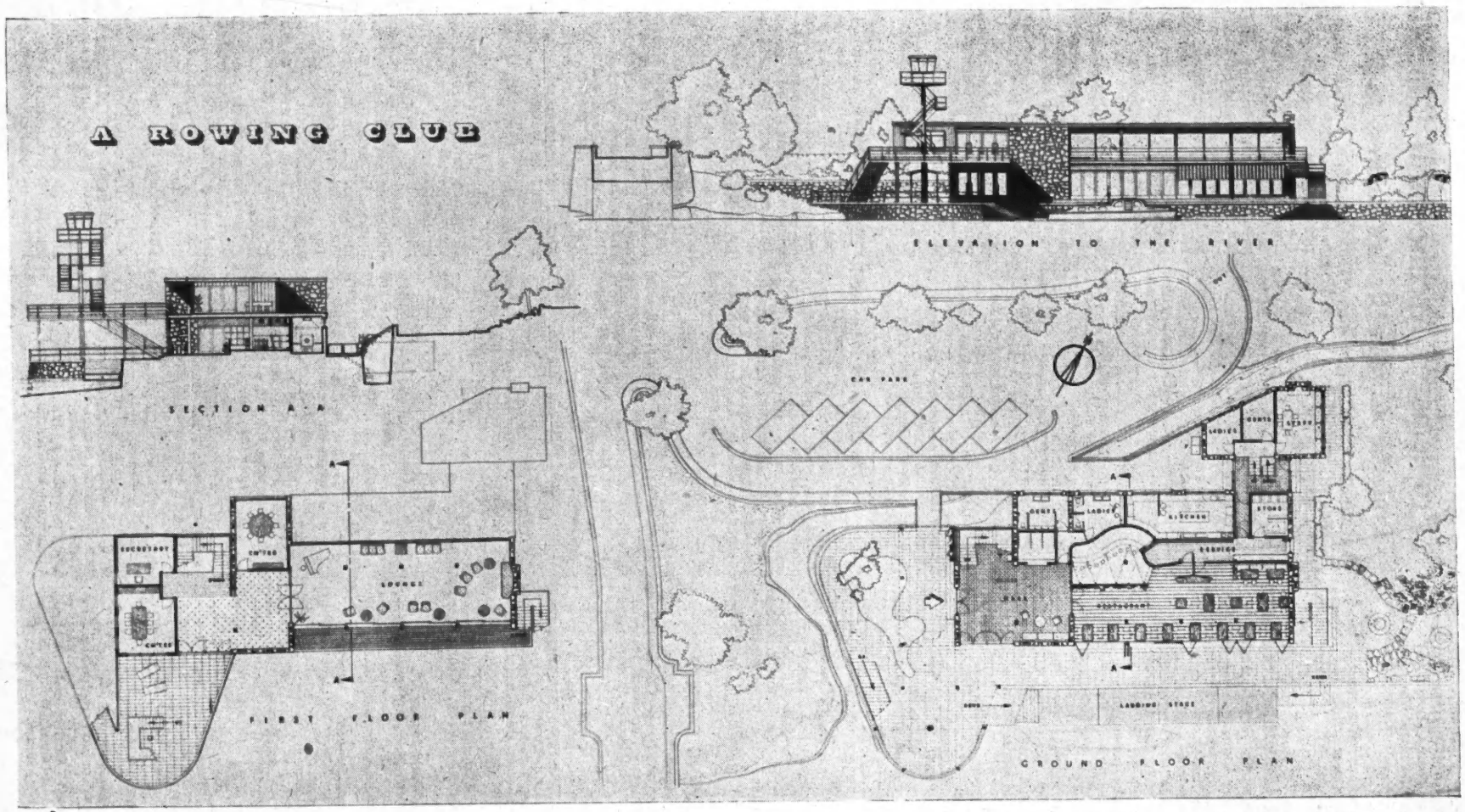
I would include not only teaching techniques but examination and testing techniques. In saying this I do not wish to imply that I think the present technique in architectural education is not good. The present system has great advantages and is valuable to the student, but I think it is too little influenced by advances in technique in other fields and parallel studies.

There is a danger that the student, working under existing methods, will be concerned with his little building and all the new problems which it raises, and he may do too little fundamental thinking.

Environment.

The next question with which I should like to deal is that of environment.

The problem of providing a fine environment is something which cannot be achieved easily. We should do our utmost to persuade authorities to place schools of architecture in fine surroundings. In addition, we should try to



THE TITE PRIZE.—A Rowing Club for a New Town. Winning design by A. C. Mackintosh, Student R.I.B.A. (School of Architecture, Edinburgh College of Art).

find means through the National Trust or any other way that might be suggested to enable students not only to work but to live in buildings of real character and beauty for a part of their undergraduate life.

This is more easily done in the country than in the town. In the country we could get our students out into fine landscape for a period of their course. I think it would be of great advantage to the students and to the profession in the long run. I am certain that for many of our young men and women it will be the only period of their lives in which they live in real country and I doubt whether anyone will deny that architects who are to undertake the great work which must be done before the end of the century must have at least this minimum experience of country life.

It might be that such a school could be situated near a new town, combining another great field of experience.

Under this heading of environment I should also like to say something about the need which I think exists for a much closer liaison between the architectural schools and those of the other arts. In recent years there has been a tendency to believe that if a certain study is regarded as valuable to an architect that subject should be taught in the architectural school. There is no reason why a general liaison between the different schools should not give the architectural student a wider experience without increasing the curriculum.

In conclusion, Professor Gordon Brown said:—

I would like to say here how much I have been impressed during my experience of the Board of Architectural Education with its broadmindedness and the way in which it has a place and gives encouragement to such widely differing points of view. I am certain that in the Board, as it works at present, we have a powerful instrument which gives real understanding and help to all heads of schools. I would say that the problems as they appear to me, a comparative newcomer to architectural education, are all major problems and they cannot be solved by the schools alone. Participation and consideration by the profession as a whole is required if we are to move forward.

Discussion.

MR. MARTIN S. BRIGGS, proposing a vote of thanks, said:—

You have heard something about the work of the Board. Professor Gordon Brown has given us a fairly good mark, which is generous of him because he knows all about it, the worst as well as the best; but I think there is a certain amount of misconception. It is a common belief that we are a gang of old men who exist to obstruct the aspirations of students. I can, however, assure you that not only do we not want to do that, but we could not even if we did. The idea of a country school, although a delightful conception, is difficult at present, and I do feel that quite a lot can be done by students who are enterprising enough to break loose from town schools and make the best of the country on their own without any spoonfeeding.

MR. THOMAS E. SCOTT, seconding, said he thought they should all agree with Prof. Brown that the school system was capable of providing a better training than any other method; but he felt that, as a body, they would do well not to overlook the benefits which office training in a good office provided. It was of great value to the profession and likewise to those who were trained by those means.

He did not think that they need fear that there would be a revival of articled pupilage which would supplant the school system, but, at the same time, he could not imagine a profession without that large and important body of assistants which performed such useful work in the office, and which prepared for qualifying examinations by virtue of studying, what one might call, the hard way. He suggested, therefore, that those who were responsible for education should keep this important group of men constantly in mind so that they, too, might benefit from any developments it was possible to make in architectural education.

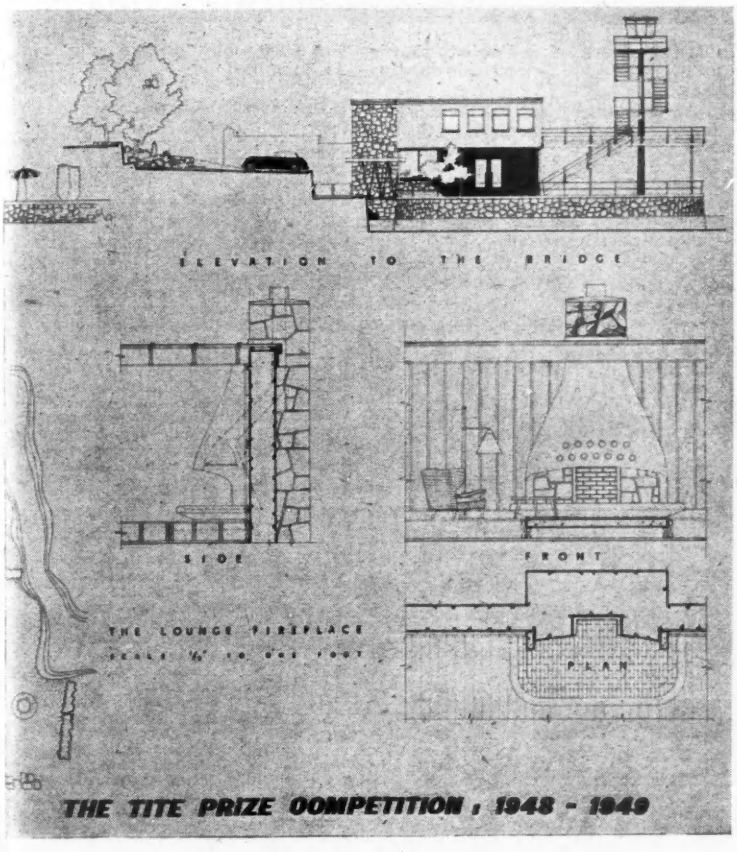
MR. W. A. EDEN: I would suggest that there are three important questions which might profitably be inquired into at the present time. Those three questions, quite briefly, are these:—Whether we are attempting to train too many people in our schools at the present time? Secondly, whether our courses, as school courses, are not too long? and, thirdly, whether those courses are not too crammed? I suggest that those three questions should be considered very carefully at the present time.

MR. R. COWAN: Out of the many subjects which Prof. Brown touched upon, I feel that I first want to take up one point which he brought out at the beginning, namely, that there are in fact two well defined opinions as to the purpose and nature of architectural education. On the one hand you have the opinion of perhaps most practising architects that the student coming out of the school should be an eminently practical person suitable as an assistant in the office, and, on the other hand, there is the point of view, which is perhaps more germane to the opinion of the school itself, that the student turned out should be a person who is a competent designer. It seems to me that a great deal of the difficulties which schools find in their training, and part of the reason why the curriculum is so crowded, is this fact that schools do attempt, as best they can, to reconcile those two divergent viewpoints. It would appear on the face of it that it might be better if they recognised frankly that there are two different requirements, and possibly institute two sequential methods of training.

MR. P. JOHNSON MARSHALL: It seems to me that there is room under the existing secondary educational system for a course in between the matriculation and the commencement of the first year of a special type which might cover not only architecture, but associated studies in science and the arts and thereby prepare students by giving them a proper basis.

MR. D. H. MCMORRAN: Prof. Gordon Brown seems to have a picture of students reading poetry and picking flowers, and while I do feel that a school of that kind, in a nice country house, would be very pleasant, you would have a little set of "æsthetes" completely cut off from the rural life around, and I think it would be a terrible thing. The only advantage I can see would be that they would have more opportunity for measuring and sketching, which does seem to me to be the great shortcoming of the present-day student.

MR. R. E. ENTHOVEN: Most of us, when we have seen in the papers remarks concerning pressure cooking, have thought of what is happening in architectural education, and have wondered whether architectural vitamins are really being retained.



THEATRE

at 144/146, Piccadilly, W.1 for London Film Productions, Ltd.

GEORGE COLES, F.R.I.B.A., ARCHITECT

NO. 144, Piccadilly, is one of the many present-day examples of the conversion of once palatial residences into suites of offices.

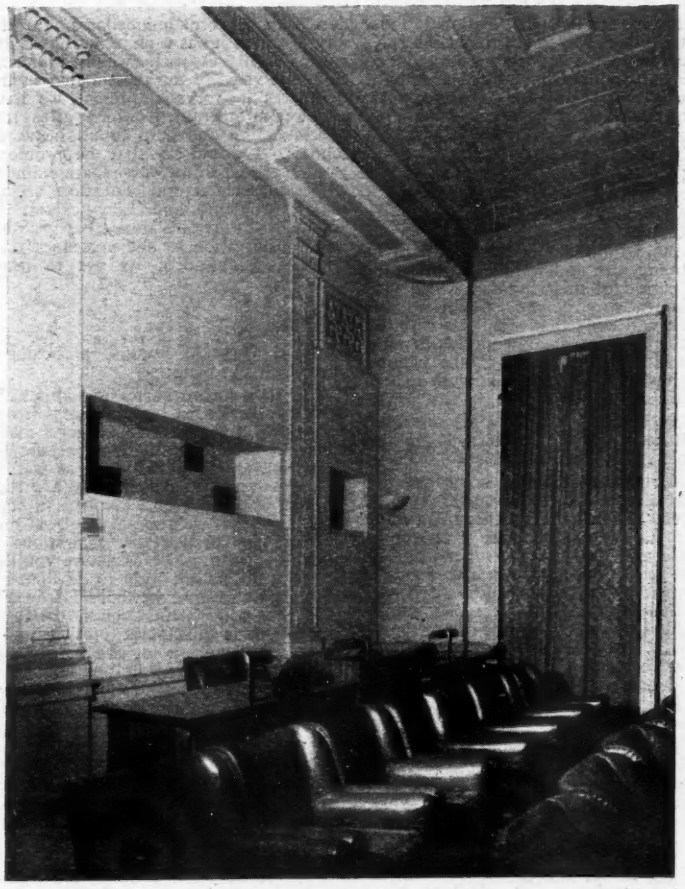
In this case Sir Alexander Korda, chairman of Messrs. London Film Productions, Ltd., required a theatre for viewing films incorporated in the scheme. After careful consideration of the planning of the house the ballroom, situated on the first floor and approached from the main staircase direct from the entrance hall, was chosen for the proposed theatre. This room also had the advantage of already having the necessary ancillary apartments such as foyers, etc.

A small projection room large enough to take No. 2 double-headed projectors and a small spot light was built on an adjoining flat roof, the wall to the Piccadilly frontage being faced in stone in keeping with the rest of the building.

The elaborate decoration of the ballroom suffered severely in the air raids and has been restored and adapted to suit the new use.

The colour scheme was carried out in close consultation with the Art Director of London Film Productions, Ltd., Mr. Vincent Korda, the colours being warm grey for the walls and ceiling, light brown carpets with curtains to tone, and brown seating.

The whole of the lighting and projection room equipment can be controlled from a desk constructed of mahogany "Holoplast," fixed on a dais at the rear of the theatre.



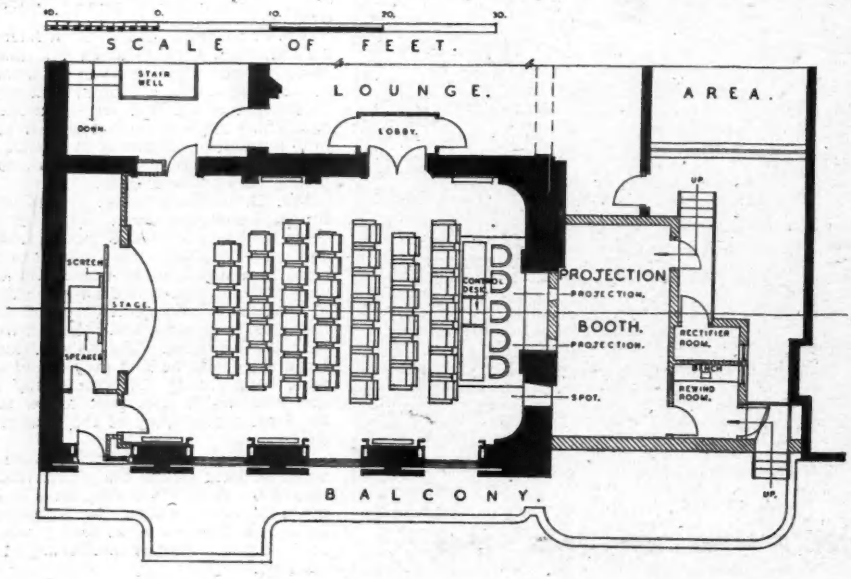
Detail of rear of auditorium, showing desk from which the projection room equipment may be controlled.

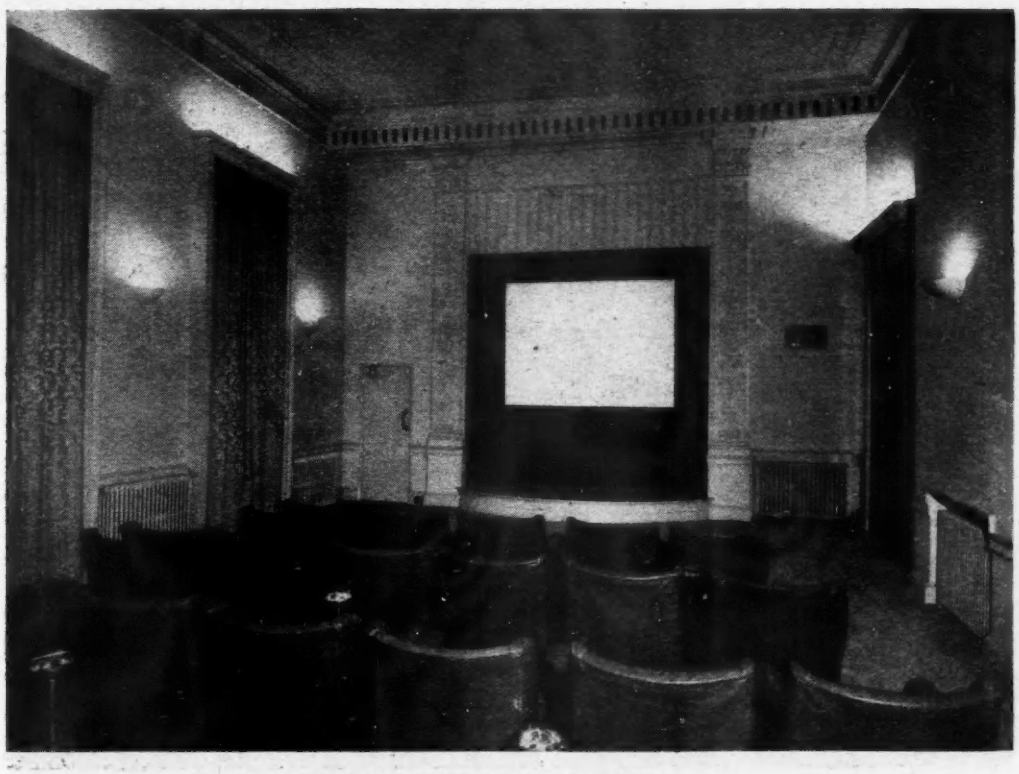
An interesting fitment in the theatre is the footage counter to the right of the screen; this enables viewers to have continual knowledge of the number of feet of film already shown.

The theatre is air-conditioned, sound-proofed against traffic noise and acoustically treated.

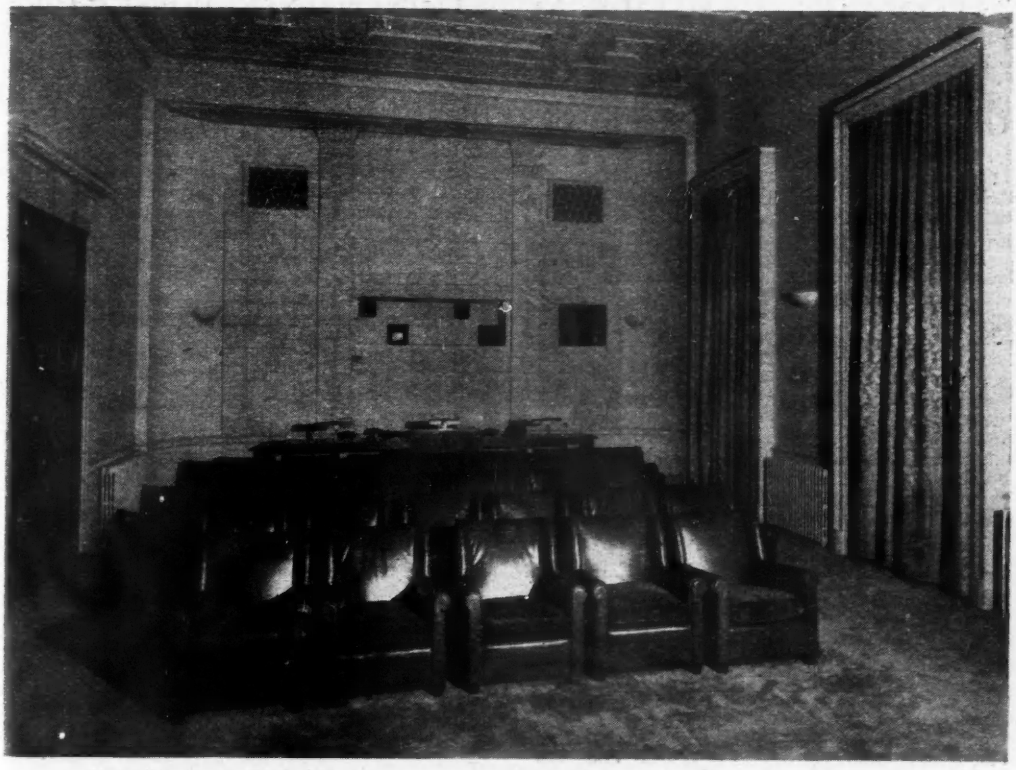
The quantity surveyors were Messrs. L. A. Francis and Sons, and the general contractors were F. G. Minter, Ltd.

The sub-contractors were as follows: Art Pavements, Ltd., terrazzo partitions; Andrew Smith Harkness, Ltd., screen frame and screen; Frank Burkitt, Ltd., projection room shutters; Bratt Colbran, Ltd., fireplace suites; E. Coules and Son, steel rack; City Iron Co., sanitary fittings; Concrete, Ltd., flooring and roofing; Carter and Co., Ltd., floor tiling; Canopy Engineering Co., racks; H. W. Cullum and Co., acoustic materials; John Ellis and Sons, Ltd., glazed cement wall finish; Excel Asphalte Co., Ltd., asphalt; John Evans (S. and H.), Ltd., heating and ventilating; Evans Lifts, Ltd., lift; Horsley, Smith and Co., Ltd., cork tiling; Haywards, Ltd., pavement light; Independent Sprinkler Co., sprinklers; W. James and Co., Ltd., windows; McGaw and Co., Ltd., standard doors; Steddall and Co., ironmongery; Smith, Walker, Ltd., structural steelwork; Troughton and Young, Ltd., electric light fittings; and James Walker, Ltd., decorations and plasterwork.





View of auditorium looking towards the screen.



General view looking towards the projection room.

THEATRE AT 144/146, PICCADILLY, LONDON, W.1

"SPINNEYS": A COTTAGE AT SUTTON POYNTZ, DORSETSHIRE

E. WAMSLEY LEWIS, F.R.I.B.A., ARCHITECT

ON this and the facing page are illustrated two houses which provide a comparison of costs for pre-war and post-war housing of this kind. These houses form a part of an exhibition, "Housing in the Stone Districts," now open at the Housing Centre in London. The exhibition will continue until Saturday, February 5.

This house at Sutton Poyntz, Dorset, was erected in 1936 at a cost of £897; with stone gate piers, a timber five-barred gate, gravelled drive and stone-flagged terrace on the south side, the total expenditure was £942 16s. 6d. The area was 1,078 sq. ft.

The house was erected by direct labour, under the charge of the late Mr. Fred. Holleyoak, stone mason. All joinery was made by Messrs. Betts and Co., of Weymouth, and fixed by the carpenter, Mr. W. T. Harrison, wheelwright, of Sutton Poyntz. F. Frazer, of Weymouth, was the plumber and heating engineer; E. Roper, of Weymouth, the plasterer; Messrs. Davis and Hadley, the electricians, and Messrs. Goddard and Diffey, of Sandhills, Cattistock, the thatchers.

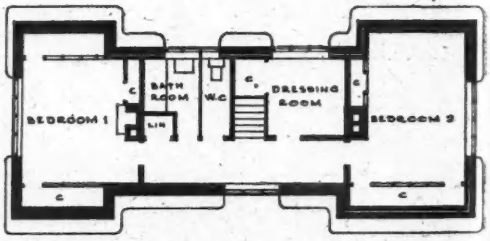
The walls are of 8-in. thick Portland Stone rubble with 2-in. cavity and 4-in. concrete block inner shell and partitions. The stone cost 6s. per ton, delivered to site. Quoins were formed of cut-offs from the sawmills and cost 8s. per ton. Chimney flues are built in brick. The roof is covered with straw reed to a thickness of 12 in., dipped in fireproofing liquid.

F. Clarke, the local blacksmith, made strap hinges to special designs for the oak front entrance, and for all Columbian pine internal doors, which were all of the moulded, ledged and batten type, all to detail.

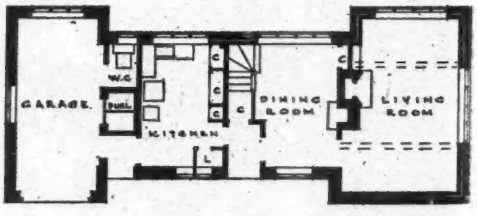
The walls of the bathroom, to a height of 4 ft. 6 in., and behind the sink in the kitchen, were covered with 4 in. by 4 in. cream-glazed tiles from Messrs. Carter and Co., Ltd., of Poole. Window boards and the floors of the entrance lobby and kitchen were formed with 9 in. by 9 in. brown quarries, laid with wide joints.

The internal plastering was wood floated; the dark brown Moreton sand, producing parchment colour, required no further decoration.

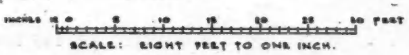
All internal joinery, except the windows, was stained with "Stainax."



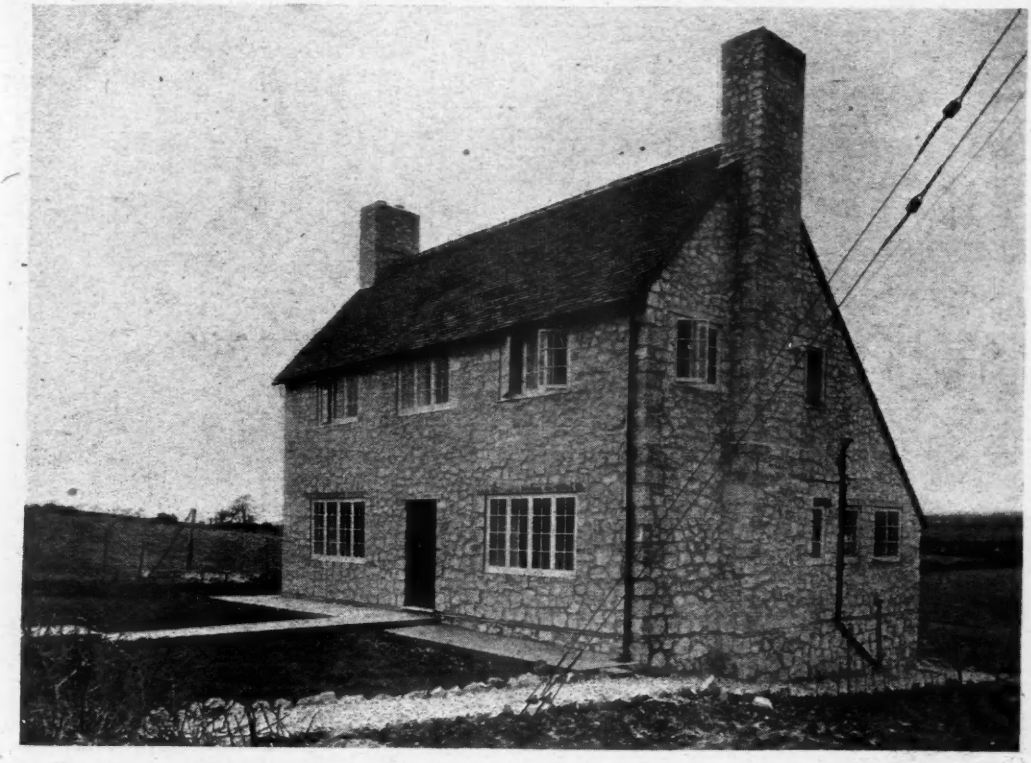
FIRST FLOOR PLAN.



GROUND FLOOR PLAN



SCALE: EIGHT FEET TO ONE INCH.



Agricultural Worker's Cottage at Tatton Farm, Nottington, Dorset

E. WAMSLEY LEWIS, F.R.I.B.A., ARCHITECT

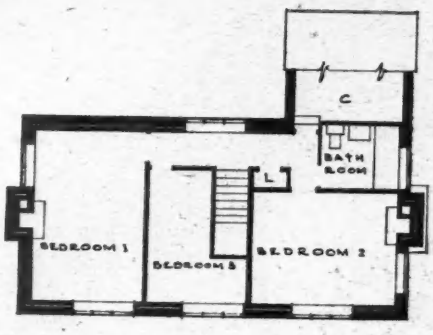
THIS cottage was designed in September, 1946, for a cowman, who was required to be accommodated near the farmhouse. A new prefabricated cow house was erected on an adjoining site at the same time.

The Dorchester R.D.C. refused a licence on October 31, 1946, because the size was in excess of the superficial area allowed. The cottage was finally approved by the local authority and licensed in May, 1947. The area was 1,100 sq. ft.

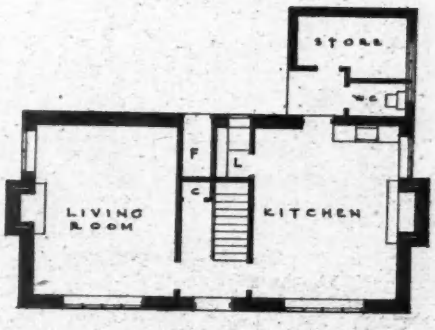
The contractors were Messrs. Hawkins and Squibb, of 92, Dorchester-road, Weymouth, the cost of the house being £1,173 (April, 1947).

In the completed house the store under the pent roof at the rear had a sink fitted in it. Drainage is to a septic tank.

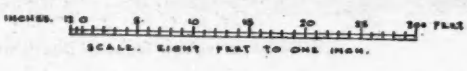
The external walls are of 8 in. stone random rubble, with a 2-in. cavity and 4-in. concrete block made with crushed stone. The roof is covered with hand-made sand-faced clay tiles, with eaves soffit also formed with plain tiles. An electrical system is installed.



FIRST FLOOR PLAN



GROUND FLOOR PLAN



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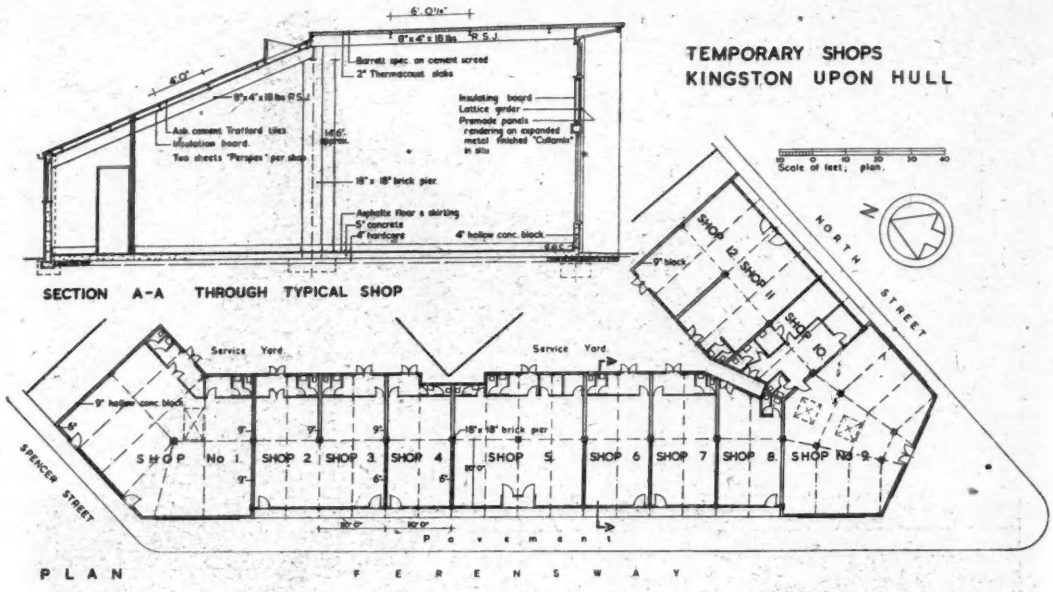
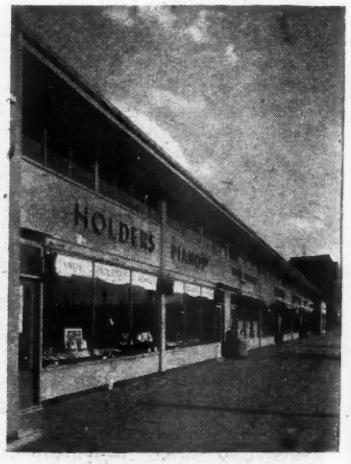


TEMPORARY SHOPS, FERENSWAY, KINGSTON-UPON-HULL

ANDREW RANKINE, O.B.E., A.R.I.B.A., CITY ARCHITECT

THE City of Hull—third largest port in the country—was an obvious target for German raiders, and during the war its citizens had to endure more alerts and more air raids than those of any other town in Britain. By the end of the ordeal the entire centre of the city was destroyed, and people were faced with an acute shortage of shopping facilities. The situation will only be completely remedied when the city's post-war development and building programme is finally realised, but meantime it has been found necessary to provide some measure of immediate relief. To this end temporary accommodation, attractive in appearance, but of low cost, and with the simplest of finishings, has been built to the design of the City Architect's Department. This includes two single-storey blocks, both on sites in the Ferensway. One block contains a group of twelve small shops, the other a single large store.

Detail of return front to North-street



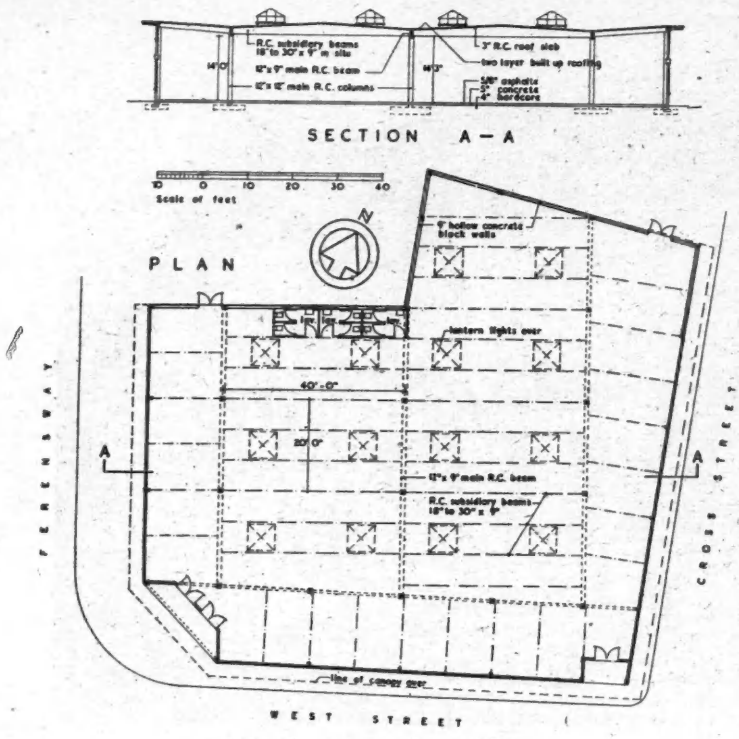
The Ferensway front.

TEMPORARY STORE BUILDING: The entrance. *Below*: **Front to Ferensway.**

The large store, for Hammonds, Ltd., is of *in situ* reinforced concrete framed construction. The column spacing in the frontage areas, where supporting members can cause little obstruction, is 20 ft. by 16 ft. 7½ in., with main beams spanning the greater and secondary beams the lesser dimension. In the central area the main beams again span over columns at 20 ft. centres, but, in order to minimise the number of internal supports, the column spacing in the other direction and the span of the secondary beams is increased to 40 ft. Here the main beams are 21 in. deep by 9 in. wide, and the secondaries, which are at 6 ft. centres, taper from a depth of 30 in. at centre span to 18 in. at the supports.

By constructing the 3 in. thick *in situ* reinforced concrete roof slab to the slope of the shaped secondary beams a shallow pitched effect is achieved in which drainage falls are formed towards valleys occurring over each of the main beams. The roof is lined internally with insulating board and covered outside with built-up bituminous roof felt. A 4-in. thick reinforced concrete slab beam, lined inside with insulation board, spans the shop front and forms the deep fascia above.

The walling generally is in 18 in. by 9 in. by 9 in. hollow concrete blocks, with cavities filled up to damp-course level. On the end walls and piers to the main elevations, the blocks are cement-lime rendered, and have a silver-grey "Tyrolean Cullamix" finish. A similar finish in cream is used on the reinforced concrete fascia. The walls at the rear of the building, which are not exposed to view, are given two coats of silver-grey cement paint. Internal surfaces are not plastered, but all are treated with two coats of cream



Plan of temporary store building.

cement paint, the second coat being dabbed with a wooden block about 2 in. by 1 in. when nearly set to give a coarse-textured finish (see detail), which masks the jointing and other structural irregularities.

For the group of small shops light rolled steel sections, brick piers and concrete block walling are the principal structural elements. A steel lattice girder supported on steel stanchions spans the display windows, and the steel joists and angles used for the roof construction are carried on brick load-bearing piers. The flat roofs consist of wood-wool slabbing finished on the outside with a covering of built-up bituminous roofing felt, and the sloping roofs are of corrugated asbestos-cement sheeting, lined on the underside with insulation board. Hollow concrete blocks are used for the walls, with cavities filled up to damp-course level and in load-bearing sections. All secondary partitions are built of foamed slag concrete blocks. The lattice girder over the shop fronts is lined with insulation board and covered outside with expanded metal lathing, cement-lime rendered and treated with cream "Tyrolean Cullamix" finish. Other external and internal finishes are similar in all respects to those used for the large shop. Cellulose enamelled pressed steel letters are used for the fascia lettering. In the large store the letters are fixed into the reinforced concrete fascia beam. In the small shops they are fixed through the rendering to 2 in. by 1 in. laths secured to the girder members before the expanded metal lathing was attached.

The designs are by Mr. Andrew Rankine, O.B.E., A.R.I.B.A., City Architect, the reinforced concrete engineering by McCalls (Sheffield), Ltd., and the building work under the direction of Mr. William Morris, O.B.E., M.I.C.E., F.R.I.C.S., City Engineer and Surveyor.

TEMPORARY SHOPS, FERENSWAY, KINGSTON-UPON-HULL

ANDREW RANKINE, O.B.E., A.R.I.B.A., CITY ARCHITECT

Right: **Detail of coarse textured internal finish obtained with two coats of cement paint.**

Below: **The interior of the store building, showing *in situ* reinforced concrete framed construction.**

CORRESPONDENCE

Norwich Cathedral Stalls.

TO THE EDITOR OF *The Builder*.

SIR,—The letter from Dr. F. C. Eeles appearing in your issue of January 7, confirms, on the whole, the information obtained by the Ecclesiological Society. It is not correct, however, to say that no moulded work has been mutilated, as the moulded rails at the back of the stalls have been sawn through in more than one place, both during the war and afterwards. It must also be stressed that to say "the stalls so divided have now been detached and used as sedilia" is not a complete account of what has been done as, after these four stalls had been removed, two were taken from the South to the North side to reduce the gap (their relative positions being reversed) and the resulting range of ten stalls moved about two feet towards the West.

In order to replace the arms rests necessarily missing when stalls are cut about in this way, the misericords left "in the air" are now, apparently, supported by "ancient stall ends brought back into use," the result being a misleading patchwork.

The Society, therefore, feels it is justified in continuing to hold the opinion that the special interest of these stalls, arising from their completeness, is destroyed.

H. L. MANN,
Chairman of the Council,
The Ecclesiological Society.

"Voysey and Blomfield."

TO THE EDITOR OF *The Builder*.

SIR,—Mr. Martin Briggs's illuminating study of Voysey and Blomfield, in your last issue, will have been read with special interest by those of your readers who had the privilege of meeting those two remarkable and completely dissimilar men—Voysey frail, sensitive and retiring, Blomfield robust, confident and pugnacious. As Mr. Briggs records, Voysey loved to design everything he could; he even designed his own clothes. I remember when I first met him over 40 years ago being struck by the remarkably unconventional suit he was wearing, particularly the trousers, which were full and baggy for the most part but tapered sharply, with creases down the sides.

Blomfield was indeed a prodigious worker. Years ago professional duty took me occasionally to his office in New Court, Temple, where I invariably found him with his coat off, hard at work at the drawing board, not merely roughing out ideas for projects for others to develop, but doing his own working drawings. As a chairman he was, as Mr. Briggs records, apt to be autocratic. I have a vivid recollection of a session of the great international Town Planning Conference held at the R.I.B.A. in 1910, at which Blomfield presided. The paper read was rather long, and Blomfield, before opening the meeting to discussion, pulled out his watch, placed it beside the gong on the desk in front of him, and announced that no speaker would be allowed more than three minutes. Distinguished town planners had assembled from various parts of the world, all eager to speak—many of them in broken English. I can still feel the tension of that crowded meeting as Blomfield, eye on watch, "gonged" speaker after speaker, most of whom had barely got beyond a few halting introductory remarks. That meeting produced little in the way of coherent discussion, but it ended dead on time.

G. J. H.

Wimbledon, S.W.19.

Architects and House Agency.

TO THE EDITOR OF *The Builder*.

SIR,—At last the die has been cast for estate agents. A period of seven years has been granted to them to remove the name of "architect" from their retail shops. But I consider the A.R.C.U.K. have made their biggest blunder; the period should have been seven hours. Nothing looks worse than the notices which read: "Auctioneers, Estate and Land Agents, Surveyors, Architects, Rent Collectors, War Damage Claims, Flats and Houses." The impression is given that they are glorified tuck-shops, dabbling in bits and pieces. "Auctioneers and Estate Agents" would be a more dignified expression for commercialism. The combination of commercialism and professionalism on fascias, brass plates, shop windows and notepaper makes it appear that the professions referred to are being handled carelessly.

Gordon House, W. MACDONALD.
16, Chiswick-lane, W.4.

Incentives.

TO THE EDITOR OF *The Builder*.

SIR,—I note with interest the directly opposite views taken, in your last issue, by your correspondents Mr. F. Russon and Mr. D. E. Phillips on the subject of Incentives. Mr. Russon is an acknowledged authority on bonusing systems and is in a position to operate and put his theories to test. It would be interesting to know whether Mr. Phillips has similarly put his theories to test and disproved what Mr. Russon and others have proved.

It would appear to me that the opinions against incentives are held by those who have not applied them or by those who, if they have, and because everything has not gone smoothly and produced wonderful results at the first effort, have given up trying and readily condemn their value because of the trouble entailed.

I agree that there are large sections of work in the industry to which it is very difficult, and often impossible, to apply incentives. That is no reason to condemn incentives as a whole. It is equally true that large sections of building work, particularly housing, lend themselves to bonusing. It is impossible to set up a rigid system, but it is not at all difficult to set up a reasonably flexible system, and there is no question of the value of its results. I think that too many builders are inclined to regard bonusing as a means of paying the operative higher wages without gain to the builder, on the theory that his share of the bonus is taken up in running the system and that there is no guarantee that the system will pay for itself and that the builder may incur a loss. It is therefore very easy to fall into the trap of paying the operative another 2d. or 3d. on the assumption that he is earning it, and to save the builder himself the trouble and cost of running the bonusing scheme. Nothing could be more dangerous or misguided than this attitude, which is not uncommon.

My experience of house building projects is that, far from being merely desirable, such a scheme is a necessity if one is going to take any measure to see that the profits one anticipates are going to result. The operatives welcome the scheme, and having once worked under an effective bonusing system ask to work on bonused schemes in the future. The increase in production under such a scheme, properly organised, can be amazing, and is a certain difference between profit and loss. I refute entirely any suggestion that such schemes, particularly where related to housing, have any detrimental effect on the workmanship; provision can be made in the bonusing scheme to penalise any tendency in this direction. Repetition engineering works, such as the production of motor cars, are run on exactly the same system, yet one does not hear that the quality of the product suffers in consequence. If builders would regard the bonusing system not as a troublesome way of paying operatives more but as a system of cost control, their outlook on incentives might change.

The setting up of any efficient bonusing scheme, which must of necessity produce the cost of a unit or series of operations at short intervals of one or two weeks, provides the builder with a knowledge of cost which he will obtain by no other method. It will give him something to compare with his estimate and will enable him to take immediate steps to ascertain the cause of such loss and employ effective methods of control; he will probably be very surprised to find how much of it is not the operative's fault. At the same time, it will set up a competitive spirit between gangs of men and will show immediately which sections are pulling their weight and which are not.

Whether or not the scheme produces an additional profit for the builder is, in my opinion, of secondary importance. It is sufficient that the system pays its own cost and, having done so, thereby guarantees the builder his estimated margin of profit. If this is achieved then the whole system, call it bonusing or cost control as you will, has achieved its object. The operative has received a higher rate of pay for his additional effort, the contractor has guaranteed his profit. What more can he want? By continued operation of these schemes, I am convinced that eventually a profit over and above cost of operation will result to the builder from continued higher output by the operative, and in due course this will be reflected in lowered tender prices due to the builder's willingness to forgo the profits arising from bonusing in return for guaranteed estimated profit.

The big trouble in the building trade today, again particularly in respect of housing, is that the margin of profit is much less than the margin of risk beyond the builder's control. This implies two main things—cost of materials and output of labour. In the majority of cases, cost of materials can be dealt with on a Basic Cost Schedule. By far the largest margin of error can result in the labour output, and by an incentive scheme the builder can effectively control that output within very narrow limits, but quite obviously the scheme will succeed in a direct ratio to the builder's efforts to make it work.

H. FORD,
Director, Rexford (Builders), Ltd.

Shirley, Birmingham.

Brightening-up Barrack-rooms.

TO THE EDITOR OF *The Builder*.

SIR,—A number of my fellow painting contractors observed with considerable apprehension that, in the *News of the World* for January 9, the Secretary of State for War was credited with the following statement:—

"I know that many barrack-rooms badly need brightening up, but you wouldn't believe how difficult it is to get a contractor to tender for painting them."

This statement is really damaging, inasmuch as the Federation of Painting Contractors would be very happy to furnish the Minister with the names and addresses of 100 *bona fide* painting contractors who would gladly tender for any number of "barrack-room" contracts that he cares to issue.

ERNIE BAYLISS.

Westminster, S.W.1.

OBITUARY

William G. Newton: A Memoir

ARCHITECTURE is the poorer for the loss of Willie Newton, and his friendliness and delightful wit will be missed by many friends. Educated at Marlborough and Oriel College, he was one of the last of a band of Oxford men who took their degree in "Greats," for now there are few who could give up three years to general education before embarking on the five-year course of the modern school. This leaven of culture nearly always brought those who had this advantage to the top, and Newton exerted a wide influence. He was a rare scholar, with an acute and sensitive mind, and an unsual gift for the written and spoken word. Everything from his pen had style.

He was handicapped by two wars, but, after qualifying, he at once joined up in 1914, and a distinguished military career brought out the man, and he became one of a band of ex-Servicemen who had a big influence on the profession in the years following 1918.

He had hesitated between being a writer and an architect, but after careful thought decided that architecture gave the opportunity to build up a broken world and to serve his generation in housing and education.

After Oxford he had, with Sir Alexander Paterson and other friends, thrown himself with zeal into the work of the Oxford and Bermondsey Boys' Clubs. He sought to give rather than to take. He also served on the R.I.B.A. Board of Architectural Education, and for a period was Hon. Secretary. He also served a term of office as President of the A.A. and was for many years a member of the Foreign Architectural Book Society, the activities of which meant a great deal to him and constituted an inner circle of friendship and architectural thought.

Though he started with the advantage of having a distinguished father, who was President of the R.I.B.A., he carved out his own career, for his first success was the winning of the competition for the Memorial Hall at Marlborough, and from that time onwards he grew as an expert in educational buildings, not only at his old school, but at Uppingham, Bradfield, Radley and Aldenham. The outcome of all this was the Merchant Taylors' School at Sandy Lodge, and a senior school for the West Riding of Yorkshire.

He was not only a scholarly designer, but a bold experimenter, as his Marlborough Laboratories show.

At Oxford his new block for Worcester College is charming, and at Alassio his Anglican church is a model for such buildings in the Mediterranean.

The second World War was a misfortune to him, as to others, for at a time when he should have been reaping the fruits of a long preparation, his architectural work, with one exception, practically ceased.

He spent the war years in his country home at Manningford Abbas, in Wiltshire, leading the quiet life of a country gentleman, a colonel of Home Guards, a Justice of the Peace.

Towards the end of the war, however, he was suddenly catapulted, so to speak, into Central Africa, to plan Makerere College, in Uganda, where Mr. George Turner, who had been Master of Marlborough, was Principal. The Colonial Office, at the same time, appointed him architect for extensions to the Gordon College at Khartoum.

The drawings and models of these schemes are full of interest, and it is sad that he has not lived to see them completed.

As a former editor of the *Architectural Review*, as a lecturer, and as Professor at the Royal College of Art, he made a mark on the architectural thought of his active years. "Prelude to Architecture" was an excellent little book that should still be widely read, while "The Work of Ernest Newton, R.A.," was a monumental tribute to his father, and "The Architectural Contribution of Imperial Rome" an example of his scholarship.

He was an ideal travelling companion in his younger days, and those who were privileged to spend happy holidays with him in Italy, Sicily and France treasure those memories. His watercolours were fresh and full of character, his sketchbooks packed with selective knowledge. He was full of quiet fun, coupled with an old-word charm that made him welcome everywhere.

Our sympathy goes out to his widow and four children.

HUBERT WORTHINGTON.

William Godfrey Newton, M.C., J.P., M.A., F.R.I.B.A (whose death was briefly reported in our last issue), was born on December 1, 1885, the youngest son of the late Ernest Newton, R.A., a past-president of the Royal Institute of British Architects. Educated at Marlborough and Oriel College, Oxford, he graduated with honours in Classics and became a student of architecture at the Royal College of Art, South Kensington. Later he served with Gerald C. Horsley and Ernest Newton, R.A. In 1911 he received an honourable mention in the Tite Prize and a year later won the A.A. Essay Prize. He went to France with the Artists' Rifles in 1914 and later was commissioned in the 1st/23rd London Regiment and served with that battalion until 1917, when he became A.D.C. to the Chief of the General Staff at G.H.Q. He returned to the line and in 1918 commanded the 1st/21st London Regiment, attained the rank of lieutenant-colonel in 1919, and was awarded the Military Cross. Returning to practice in 1919, he was for some years editor of the *Architectural Review*. He was selected as Lecturer on Architecture in the University of Oxford, and succeeded his friend Hubert Worthington as Professor of Architecture at the Royal College of Art.

His work as an architect embraced school, domestic and ecclesiastical buildings and after his work at Marlborough, where his design for a Memorial Hall was won in competition, Uppingham, Bradfield, Radley and Aldenham, he was selected as architect for the new Merchant Taylors' School at Sandy Lodge. Apart from housing schemes at Otford, Woolwich and Shirehampton, he also designed the County Fire Office in Piccadilly Circus, the Anglican Church at Alassio, the Territorial Headquarters in Albany-street, new buildings for Worcester College, Oxford, the head office of the Croydon Gas Company, a senior school for the West Riding of Yorkshire, and a number of country houses. The Stansfeld Club, Southwark, for the Oxford and Bermondsey Clubs, was rebuilt to his design in 1921, and in the same year he carried out the Balliol Boys' Club, Oxford, and a farmhouse at Elmbridge Green, Droitwich, as well as the Prestbury Memorial Porch, Cheshire.

In more recent years he prepared development schemes for Makerere College, Uganda, and for the Gordon College, Khartoum, which were exhibited in the Royal Academy Summer Exhibitions in 1948 and 1947 respectively. (Illustrated in *The Builder*, May 16, 1947, and May 14, 1948.) He was president of the Architectural Association in 1921 and served on the Council of the Royal Institute of British Architects from 1920 to 1923 and was at one time a member of the Board of Architectural Education. His home was at the Old Rectory, Manningford Abbas, Wiltshire, and he was president for several years of the Wiltshire and Dorset Society of Architects. His literary work included "The Architectural Contribution of Imperial Rome" (1912), "Prelude to Architecture" (1925), "The Work of Ernest Newton, R.A.," and "Military Landscape Sketching," the result of his experiences in the 1914-18 war and the spare-time pursuit of a lifetime. He was also a former external examiner of Liverpool University.

HOUSING IN STONE

A HOUSING CENTRE EXHIBITION

THE exhibition of "Housing in the Stone Districts" is of unusual interest, showing as it does the use in housing of local materials as in the past. Many examples possess local character. The housing designed and carried out by Messrs. Pemberton and Bateman possesses charm and character, and avoids the monotony of so many housing schemes. The question of cost of these and other stone cottages would be of interest for comparison with cottages built of "imported" materials. The conversion of an old barn at Snowshill is very charming and practical. Other examples by this firm are equally meritorious, and when weathered will settle unobtrusively into the landscapes. Another group of three cottages, by Mr. Thomas Rayson, F.R.I.B.A., for the North Cotswold R.D.C., is pleasing in grouping and general proportions. Rural workers' cottages at Eastcombe, near Stroud, designed by Messrs. Stockford, Careless and Ashwell, group well in the general view and are nice in scale. More unusual are the terrace houses at Asthall, Burford, Oxfordshire, by Peter Dunham; here the view from the road of this group is very satisfactory. Mr. Wamsley Lewis exhibits examples of his work in Dorset (two of which are illustrated in this issue). Small houses, as they are, they have individual character with their thatched and tiled roofs and varied elevational treatment.

A number of examples come from one Yorkshire locality; these also maintain the character of their district, which, perhaps, is more austere than the picturesque Cotswold types. Plans and notes accompany the examples mentioned. The Housing Centre is to be congratulated on an exhibition of unusual character which is a credit to the designers in these days of mass production. A visit will be well repaid. The display is open daily at 13, Suffolk-street, S.W.1, up to February 5.

When speaking at a conference organised by the Housing Centre at Central Hall, Westminster, on Monday, Mr. Bevan, Minister of Health, said that it would be a national misfortune if all our building in stone ceased; but stone was expensive and because it had not been used for a long time there were not enough craftsmen. An inter-departmental panel was investigating costs of stone-building in different parts of the country. A report to be published by the Ministry of Works before the end of this month would suggest ways of increasing the supply of masons.

Underpinning a Block of Flats

Some Notes on Structural Repairs

A CORRESPONDENT writes: One of the most interesting features of the post-war period, from the structural engineering aspect, has been the considerable amount of repair work to extensively damaged structures, and this type of work, although possibly less spectacular than new development, demands considerable care in its preparation and skill in the execution before the structure can be said to be fully restored to its previous strength.

The details of one such example are given in the following report.

The building in question is a block of residential flats situated in South-West London, having been built in the years 1934-1935, and although it is not relevant it is worthy of note that the architecture of the building is of no mean merit, and the architect's original drawings were exhibited at the 1935 Royal Academy Summer Exhibition.

The layout of the building consists of two wings running in an east-west direction, connected by a central block at right-angles, the whole thus approximating to the letter H.

The building is of mixed construction, consisting of load-bearing brick walls supporting filler joist floors, the walls being 18 in. thick at the lower storeys and 13½ in. thick above the second-floor level, the total height being 56 ft. from ground to parapet level.

In the rear wing, which contains a motor showroom at ground-floor level, the upper storeys are supported on steel stanchions in order to provide clearances for the vehicles. Under the same wing there is also a small basement.

As originally built, the wall and column foundations consisted of mass concrete founded on ballast at about 3 ft. 6 in. below ground level. This ballast stratum consisted of Taplow gravel about 13 ft. thick overlaying London clay of considerable thickness.

In the early part of 1941 a high-explosive bomb fell on the rear of the central block of the flats, cutting through the building and forming a crater about 30 ft. in diameter and some 12 ft. deep.

The front wing and part of the centre block were only slightly damaged structurally, but the remainder of the centre block and the rear wing were severely damaged, and as a result a portion of the centre block was demolished and the remainder of the building sealed off. During this operation it was necessary to take down part of the north wall of the rear wing and to support the floors temporarily on brick piers built on new mass concrete foundations constructed inside the building. At the same time the basement was heavily strutted by means of timber shores, as it appeared to be in danger of collapse.

In September, 1946, it was decided to commence the reconstruction of the building, and an investigation was made of the extent of the damage for the purpose of presenting a report recommending the manner of effecting the necessary repairs. It had already been decided that the new foundations for the demolished central portion should be taken down below the level of the bomb disturbance, that is to say, into the London clay.

This report, therefore, deals exclusively with the structural repairs to the damaged rear wing.

Survey of Damage.

A preliminary inspection of the damaged structure was sufficient to produce the feeling probably experienced by many confronted with similar problems of "not knowing where to start." However, it was apparent that considerable cracking and displacement of the brickwork had taken place and it was therefore decided to "plumb" the sides of the building and investigate the major cracking. From the results of these investigations it was found that although the walls were not seriously out of plumb, local bulges had occurred involving differences up to ⅞ in. in the vertical height of the building. In addition to the general cracking of the brickwork, the following four separate effects of the explosion were traced :

(1) Two major horizontal shears were found to have taken place at the third- and fourth-floor levels across the whole section, the overlying courses at these cracks being as much as ¾ in. out of line.

(2) A very severe diagonal shear crack had occurred in the north elevation below first-floor level.

(3) The north wall of the basement, which supported the internal wall over the full height of the building, was found to have cracked just below ground-floor level and moved so that the upper and lower faces of the brickwork showed a horizontal displacement of over 3 in.

(4) The steel stanchions in the motor showroom were also found to be out of plumb, having conformed to the general movement of the building, the maximum deviation being 1⅞ in. in a height of approximately 12 ft. In addition, the main twin joist bressumer over the motor showroom in the west elevation had been distorted and the webs slightly buckled.

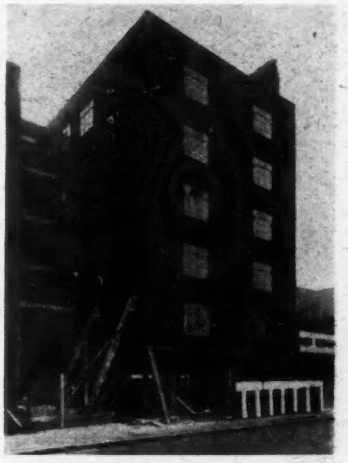


Fig. 1.—General view of the N.W. corner of rear wing.

From the results of the investigation it was apparent that the building as a whole had been displaced in a south-westerly direction, *i.e.*, along a radius from the centre of the bomb explosion. This was evident from the disturbance of the brickwork and confirmed by the displacement of the steel columns.

Remedial Works.

In the consideration of the remedial measures to be adopted it was essential to distinguish between the structurally dangerous work and that necessary to restore the appearance of the building. Thus, the horizontal cracking which had occurred at third- and fourth-floor levels was not regarded as serious, and instructions were issued for the cracks to be cut out and rebonded; all local cracking of the brickwork was treated in a similar manner.

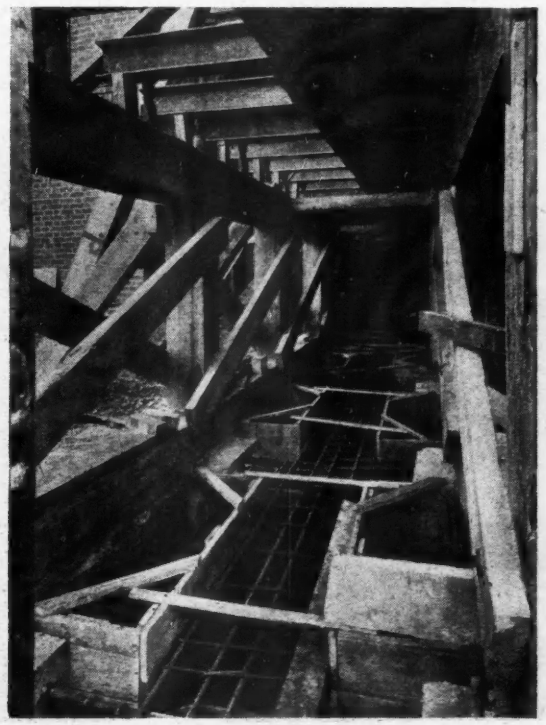


Fig. 2.—Underpinning of N.E. wall. The pile beams and needles.

The brick walls regarded as structurally unsafe had obviously to be taken down and rebuilt. Included in this category was the whole of the east elevation and the east corner of the south elevation. It has already been mentioned that part of the north wall had been demolished and consideration was given to the level of the foundations for the new brickwork.

It was evident from the displacement of the basement wall that the ballast subsoil had been disturbed and was, therefore, incapable of carrying heavy loads.

It should be remarked here that the gravel bed upon

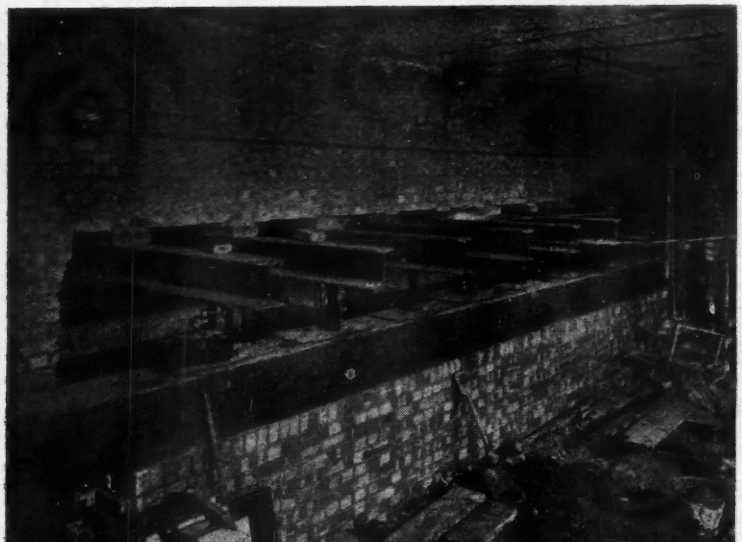


Fig. 3.—Underpinning of party wall over basement. View from the ground floor.

which the building is founded is relatively shallow and contains flowing water. It was, therefore, necessary to pass through the gravel to the London clay below before a satisfactory undisturbed foundation could be found.

Reference back to the survey of the damage shows that four major items of repair were specified. The repair to item (1) has already been mentioned and no further description of this work is necessary. The manner in which the repairs to the remaining items were carried out may be of interest.

North Elevation Wall.

Owing to the very extensive diagonal cracking that had occurred in the lower portion of this wall, it was decided to underpin the wall just below first-floor level and to cut out and reconstruct the section on new foundations. As the dead load from the wall and floors over amounted to nearly 5 tons per foot run, it was considered essential to support the heavy concentrated loads from the vertical struts on to a firm foundation, and for this reason a piled foundation was adopted.

The method used was as follows:—

Two rows of five 16 in. diameter *in situ* concrete piles approximately 18 ft. long were cast into the ground at each side of the existing wall footing, and the reinforcing bars left projecting. The wall footing immediately adjacent to these piles was then cut away to finish flush with the wall face and 2 ft. 6 in. sq. pile caps constructed incorporating the pile bars. Beam bars were also cast into the pile caps and left projecting, and cranked to clear the wall, but sufficiently long to be afterwards straightened to form the foundation beam reinforcement.

A system of cross-braced timber shoring was then erected, consisting of 14 in. by 14 in. head timbers supported on 12 in. by 12 in. vertical struts at 8 ft. centres; these rested on horizontal 12 in. by 12 in. timbers seated on the pile caps. As an additional precaution, raking shores were also erected, strutting the wall from the second floor level to the ground. Holes were cut into the existing brick wall just below the first-floor level and 9 in. by 7 in. R.S.J.s inserted at 3 ft. centres, each end of the joist being supported on a 10-ton screw bottle jack which was carried on the head timbers.

Padstones were bedded and seated between the top of the R.S.J.s and the brick wall, and after these had been allowed to set the jacks were carefully tightened in rotation until it was evident from the agreement between the calculated and measured deflection of the R.S.J.s that the jacks were exerting their pressure on an unyielding foundation. The wall having been securely underpinned, the lower length was cut away and the existing footings removed. This permitted the beam bars projecting from the pile caps to be turned down and straightened, and they were then used as the reinforcement to a new beam 2 ft. 6 in. deep by 2 ft. 6 in. wide spanning between the pile caps which was cast together with an R.C. footing beam, 2 ft. 6 in. deep by 2 ft. wide, immediately under the brick wall. By this method the load from the brickwork was carried directly on the piles and the possibility of settlement due to founding the wall on disturbed ground was avoided.

These operations having been completed, the demolished wall was rebuilt, and after allowing time for the setting of the mortar joints the jacks were released, the R.S.J.s withdrawn, and the strutting and raking shores taken down.

Throughout the whole operation a careful check was made of the level of

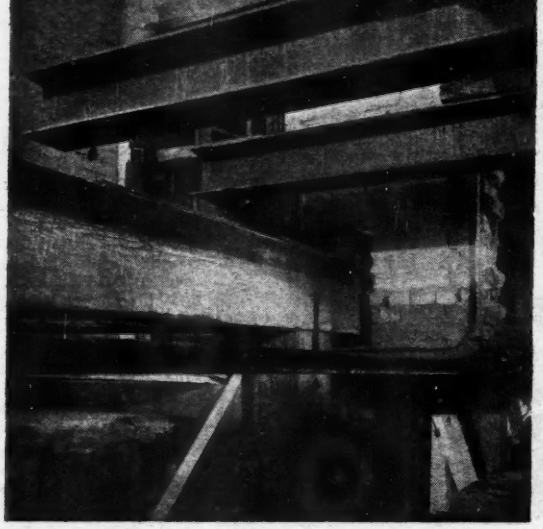


Fig. 4.—Underpinning of party wall over basement. The new wall being rebuilt.

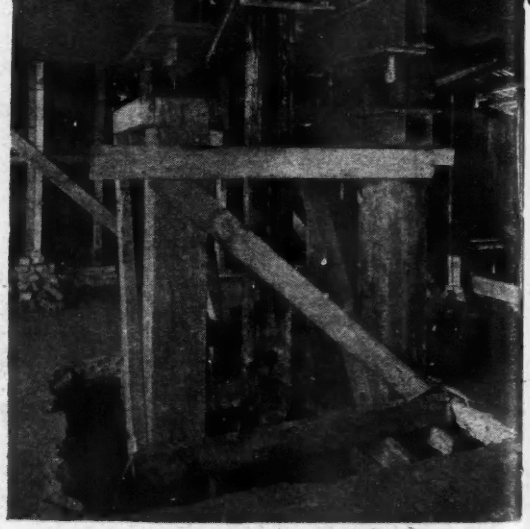


Fig. 5.—Underpinning for plumbing of the central stanchions.

the head timbers in order to detect any unequal settlement, and although on one occasion it was unexpectedly and possibly erroneously reported that an upward movement had been observed, no unequal settlement was recorded.

It is interesting to note that despite the fact that the walls of the flats over had only just been re-plastered, no hair cracks were visible either during or after the course of the works described.

Figures 1 and 2 illustrate this section of the work, the former being a general view of the north-west corner facing the motor showrooms, and the latter showing the foundation beams ready for concreting after the defective brickwork had been taken down.

Basement Walls.

The displacement of the basement wall was the next major repair, and the methods used were very similar to those in the previous operation, although, owing to the additional depth of the basement, the foundations of the underpinning supports could be carried into the clay and the use of piles was unnecessary.

Continuous mass concrete foundations 3 ft. wide were first cast in 5 ft. lengths at each side of the existing footing and carried down into the clay below the level of the underside of the footing. On the basement side these foundations were approximately 4 ft. deep, but on the opposite side the depth from ground level was about 11 ft. The 5 ft. lengths were cast in a staggered sequence in order to avoid opening up too large an area of ground at any one time.

The concrete foundations having been completed, the wall just above the ground floor was underpinned, using the materials and methods previously described, the only alterations being the closer spacing of the 12 in. by 12 in. vertical struts at 6 ft. centres in order to carry the increased wall loading of 5.9 tons per foot run, and the cutting through of the ground floor in order to permit the passing of the struts. An inspection of the existing concrete footing after the lower section of the wall had been demolished revealed that the concrete was perfectly sound, and the new wall was, therefore, built off the old footing. Figure 3 shows a general view of the work taken from the ground floor, and figure 4 a view taken from inside the basement, looking up, showing the new wall being rebuilt.

Although this work has been described in a brief manner, in actual practice it was considerably complicated by the obstruction caused by the heavy timber strutting inside the basement, and also owing to the presence of water which necessitated intermittent pumping.

Structural Steelwork.

As has previously been mentioned, the steel stanchions in the motor showroom were found to have been displaced a distance of nearly 2 in. in their storey height. Calculations showed that they were fully stressed as originally designed, and considerably overstressed due to the additional eccentricity caused by the displacement, and it was accordingly felt that such important members should not be the subject of conjecture and that they should be restored to the vertical.

The stanchions were of the single-storey type and supported the heavy main beams at first-floor level; the average load being approximately 130 tons.

As the method used was the same for all members, a typical example only will be described: an internal 10½ in. by 10 in. plated joist stanchion supporting a 26½ in. by 10 in. plated girder having an end reaction of 66 tons on each flange.

The 14 in. by 14 in. timbers recovered from the previously described underpinning work were now erected as vertical struts at each side of the stanchion and cross-braced with diagonal timbers to form a rigid staging. Fortunately, the original mass concrete foundations were of considerable area and the sleeper beams under the struts could safely be carried on the bases.

A 30-ton hydraulic jack was then seated on each strut and a twin joist bearer composed of two 16 in. by 6 in. R.S.J.s with welded connecting plates inserted across a pair of jacks and centrally under the plated girder. In addition, two 30-ton jacks were positioned at right-angles to each other so as to exert their pressure in the required direction on the shaft at the base of the stanchion. The upper jacks were then carefully tightened up in rotation until it was evident from the audible creaking of the timbers that the load from the girders had been transferred from the stanchion to the struts. After this had been completed the lower jacks were applied, and it was found that once the bond between the stanchion slab base and the grout underneath was broken it was a relatively easy matter to re-align the stanchion accurately.

The ease with which this was carried out was due in no small measure to the fact that the bases had been erected without holding-down bolts, although had this not proved to be the case, the bolts would have been cut out and reconcreted.

It may be of interest to mention that under pressure of the jacks the stanchions took up their new positions in a series of "chatters" rather than in a steady movement.

A fine cement grout was then run under the slab base, as this had now been displaced from its original position. Finally, the upper jacks were released, at which stage it was then possible to remove the lower jacks and staging and transfer the whole apparatus to the next stanchion. The apparatus used is shown in Figure 5, which is a photograph of the stanchion taken after the plumbing had been completed.

The only outstanding repair was now the buckled webs of the twin 18 in. by 6 in. R.S.J. bressumers over the motor showroom, which may be seen in Figure 1. These were strengthened by welding fitted web stiffeners to the exposed joist, after which the cavity between the twin joists was filled solid with concrete.

The whole of the works described in the foregoing were completed in the short time of four months, which was due in no small measure to the care with which the work was carried out by the contractors, Messrs. Allard and Saunders, Ltd., of Putney.

Mr. F. R. Bullen, B.Sc.(Eng.), A.M.I.C.E., M.I.Struct.E., the consulting engineer, prepared the report on the remedial measures and supervised the work.

R.I.B.A.

Intermediate Examination

THE R.I.B.A. Intermediate Examination was held in London, Plymouth, Manchester, Leeds, Newcastle, Edinburgh and Belfast from November 5 to 11. Of the 509 candidates examined, 191 passed and 318 were relegated.

PLANNING ACT "BRAINS TRUST"

PRACTICAL QUESTIONS AT CHARTERED AUCTIONEERS' MEETING

A MEETING of the Chartered Auctioneers' and Estate Agents' Institute on January 6 took the form of a "Brains Trust" on practical questions arising under the Town and Country Planning Act. The members of the "Trust" were Mr. G. D. Blake, Mr. Ronald Collier, Mr. M. Basil Evans, and Mr. D. M. Lawrance, barrister-at-law, all of whom are Fellows of the Institute and of the Royal Institution of Chartered Surveyors. They answered over twenty questions which had been previously circulated.

One of the early questions concerned the supposed case of a builder who owned an estate which he was developing before the Act came into force. He had sufficient land left to build a further twenty houses, but he would have to construct roads and sewers to serve them. Assuming his land was not affected by the near-ripe scheme, how should he apply for development charge to be assessed? Should it be on the whole development, that is to say, the aggregate of the construction of the roads and the building of the twenty houses, so that the development charge on the houses was reduced to the cost of the roads?

MR. COLLIER, who answered this question, said that in his opinion the making-up of roads which were taken over by the public authorities was exempt from development charge. Bearing that in mind, Mr. Collier advised that planning application should be made, not for the roads first as one step, and the houses second, but for the roads and the houses together, in which case the builder would not be mulcted in unnecessary development charge. He also agreed—and thought the Central Land Board would agree—that the basis of payment should be by instalments.

A further question was whether there was any ground for claiming exemption from development charge in respect of land on which a building had been erected but had been demolished prior to 1937. MR. LAWRANCE replied "No"; he said that para. 1 of the Third Schedule definitely applied only to buildings which had been destroyed or demolished prior to January 7, 1937. One exception was in cases where a charitable trust had acquired since 1937 land on which there was no building and proposed to use it in the near future for the purpose of their charity. MR. EVANS suggested that another possible exception was in cases where the owner might be able to claim exemption under sect. 80 (land ripe for development before the appointed day).

A question which aroused some difference of opinion among the members of the "Trust" was that regarding the type of occasion when it was undesirable to answer the optional part of S.1 form.

MR. COLLIER thought that in any instance where the claimant was going to develop the land it was undesirable to put in figures. At all events figures should not be put in when one did not know what they were. It was well to remember that rating was being passed over to the Inland Revenue, and that any figures of unrestricted value which one put in would undoubtedly be used in evidence against one when the rating assessment was made.

MR. BLAKE, on the other hand, could

not wholly agree. He was with Mr. Collier when he said, "Don't put figures in when you don't know what they are"; but one was not in a good negotiating position if one stood aside and let the other man have his figure. He thought it a good idea to put his bid in first.

MR. LAWRANCE could not agree with Mr. Collier's statement that the claim was necessarily going to be the basis of the development charge. Obviously, in a case where development was going to take place almost at once or within a few years that was so, but there must be a number of cases, not only far-fetched ones, where actual development would probably not take place for some considerable time in the future, and in such cases the development charge would be based on values at the date when development took place.

Finally, MR. EVANS thought that figures should be put in when humanly possible. He thought, with Mr. Blake, that there was an advantage in getting one's "say" in before the other man.

An interesting hypothetical case was put in the form of a question. "X" purchased a plot of land in 1936; afterwards "Y," the owner of the adjoining plot, erected a shop and dwelling-house. It was found afterwards that the shop was erected as to 4½ in. on "X's" plot. "Y" thereupon entered into a deed of covenant with "X," agreeing that the flank wall between the two plots should be a party wall and giving the right to "X" to utilise the wall for future development. Could "X" claim that he had an unfinished building within s. 78?

MR. EVANS pointed out that an unfinished building under the section was one which could have been completed in conformity with the provisions of a planning scheme or of permission granted thereunder, and it did not appear that in this case such permission had been obtained. Therefore, "X" could not claim that he had an unfinished building. But what would be the position if he had permission? Take a parade intended to be of twelve shops, of which six only were erected when the war broke out. Thus there was one shop at the end with a party wall ready for the addition of the seventh shop. Could this seventh shop, although invisible, be regarded as an unfinished building because the party wall was there? He felt that on a technicality that would be so. He did not think it could extend to the eighth shop, no part of which was in being.

MR. COLLIER emphasised that where a party wall had been genuinely erected for the purpose of another building it constituted an unfinished building. There were in existence a very large number of such unfinished buildings; one had only to look up town planning consents of quite a long time ago.

A Question of Injurious Affection.

Another question concerned an owner and occupier of a modern detached house, worth about £4,000, who also owned the adjoining strip of land, with road frontage to the depth of his house plot. This additional plot offered sites for five or six further houses. The unrestricted value of the plot (¼ acre) was assumed to be £900, and the restricted, £75, the difference, namely £825, being the amount of claim for the loss of development rights. The owner might, however, be forced to sell the vacant land to a builder for the erection of four bungalows to cost £1,250 each, and their erection would reduce the value of his own house by at least £1,000. How should this theoretical loss be claimed?

MR. COLLIER replied that the possibility of compulsory acquisition of land was something which everybody had to face and was faced as it occurred. There was nothing in the Act to give any special value for severance or injurious affection or some hypothetical issue in the future. When compulsory acquisition occurred, apart altogether from this Act, there would arise the claim for severance or injurious affection, so that this was disregarded in making a claim.

MR. LAWRANCE added that if the owner in this case was forced to sell he would not in fact be forced to sell to a builder but to the Central Land Board, which would dispose of the land to a builder for development purposes. Sect. 44 of the Act incorporated certain provisions of the Town and Country Planning Act, 1944, and if he read sect. 22 of the 1944 Act aright, what happened in cases where the Central Land Board acquired land, and afterwards disposed of it for development, was that when development took place the owner would be entitled to just the same sort of compensation for injurious affection as though in an ordinary compulsory purchase case development had been carried out by the acquiring body. The immediate right to compensation was against the person who had carried out the development, and if they could not get it from him they must refer to the Central Land Board. That would also apply to cases where there were easements or restrictive covenants. The claim was against the person to whom the land was transferred and who carried out the development. Failing that, there was a right against the C.L.B.

MR. EVANS wondered whether it might not be said that in certain circumstances the restricted value was more than £75 on the ground of what was known as amenity. It might be possible to import into restricted value the value of the land to adjoining owners from the point of view of preventing building taking place on it.

MR. BLAKE said that he could not make the position any simpler, but he could make it a little more confused, namely, with reference to the figure of £825. According to sect. 61, it was necessary to knock out of the development claim injurious affection, and a man could not put up half a dozen houses in his garden without injurious affection to his other property.

A further question was whether in assessing the restricted value of a site formerly occupied by a building destroyed by enemy action, it could be notionally assumed that the old building could be replaced even though this would not conform with local building bye-laws. MR. EVANS was of opinion that, when considering what they must put back, they need not religiously keep to the old building, but might let their imaginations run riot to some extent. If there was a residence there before, then, provided they kept within the ten per cent. tolerance, they could put up a building for the same use as before without having to keep to the same plan, assuming, of course, conformity with the present building bye-laws.

A highly speculative question was whether it was possible to adopt as a unit in preparing a claim, say, the first floor in a building of four storeys, together with rights of approach, or would the claim be ruled out as not falling fully within the definition of "land." MR. LAWRANCE was doubtful about the admissibility of such a claim, assuming the necessity of an approach, which was outside the definition, but he had consulted a greater authority whose opinion was that it was admissible. MR. BLAKE said that if the expert quoted by Mr. Lawrance was right, he himself had given the wrong advice in a number of cases. MR. COLLIER said that he also had taken an expert opinion, which confirmed Mr. Lawrance's expert. MR. EVANS thought it a waste of time to debate this proposition; surely under the proviso in sect. 12 (2) "he would get away with it anyhow."

A questioner asked whether the "Brains Trust" was of opinion that as a general rule, when the use of property changed, it was because the new use was more valuable than the old. If not, could sufficient examples be given to disprove any such general rule? MR. COLLIER said that normally the use was not changed for any less valuable use, but very often it might be changed for a use of equal value, and therefore automatically it was not essential to assess the development charge. When a building was pulled down and rebuilt the value of the existing building plus the site was approximately equal to the site value for the purpose of the new building, and there should not be a development charge.

Compensation under Compulsory Acquisition.

Finally, a request was made to the "Trust" to state the circumstances under which compensation for severance and injurious affection sect. 61 (6) (*a*) and (*b*) arose when compulsory acquisition occurred, so that claimants might know how to answer question 28 on form S.1 correctly. Mr. Lawrance, as a barrister-at-law, answered the question thus:—

In compulsory purchase cases damage for severance can be claimed where part only of an owner's property is taken and the remainder is depreciated in value by the loss of that part, as, for example, the depreciation which might result to a house if a considerable portion of the front garden were taken away for a road widening scheme, or the loss in value which might result to a factory assuming that some land at the side of it and forming part of its curtilage were taken and deprived it of any possibility of enlargement in future.

Injurious affection arises where not only is part of the land compulsorily acquired and severed from the remainder, but the part taken is put to some use which detracts from the value of the remainder.

Therefore, for the purpose of sect. 61, and in answering that particular question, one has to say to oneself, "Assuming this particular piece of land which forms part of the whole area in respect of which I am making a claim is acquired compulsorily by a Government department, what injury would be caused to the remainder of the land on which I am not claiming?" That figure has to be set off against the unrestricted value. Then one has to ask oneself, "Supposing that this particular piece of land which is the subject of the claim were not only acquired compulsorily but were also developed by the acquiring body in precisely the same form of development on which my claim is based, what effect would that have on the remainder of the property? What depreciation would it cause?" If there is any depreciation, that must be set against the unrestricted value.

THE HARTLEPOOLS

A Survey and Plan

Reviewed by H. V. Lanchester.

MR. MAX LOCK and the team of experts he has gathered together have now produced their Survey and Plan for the Hartlepools.* After the work so successfully accomplished by the group at Middlesbrough it was only natural that it should be invited to deal with a port and industrial centre so near at hand, the two being separated only by the salt-bearing area around Greatham. Unlike Middlesbrough, which has developed on the river Tees almost entirely during the past century, the original Hartlepool, occupying a promontory jutting out into the North Sea, dates from Saxon times, being mentioned by Bede as the site of a religious house founded in A.D. 640. Under the protection of this monastery a small community on the sheltered south-west shore of the peninsula became established as a fishing village. It was raided and practically destroyed by the Danes in A.D. 800, but the Danes themselves re-established the settlement some eighty years later. The church was erected about the end of the twelfth century.

During the thirteenth century the town became more important owing to the increase of trade. A mayor was appointed and walls were built as a defence against the Scots, Hartlepool being then reckoned as the most valuable township in the Palatinate, with the possible exception of Durham, and this position was maintained until the Reformation. Then trade became diffused among the river ports of Yarm, Sunderland and Gateshead, partly owing to the easier access to these for the new export "sea coal." Not until the advent of the railways did Hartlepool recover its position as a seaport, and in 1838 a new era of railway service and dock expansion started.

This initiated West Hartlepool, as the docks were carved out of the low-lying ground south-west of the old harbour, still guarded by the higher peninsula to the N.E., and the new town grew up around the docks and the village of Stranton, extending eventually to the coastal resort of Seaton Carew. Before the coming of the railway and docks this area had a population of only a few hundreds; now it has over 60,000, occupying a site of some four square miles, but in common with other developments of the same period, it suffers from a haphazard growth which demands much rectification, a condition made very clear in the present report.

The survey reviews these conditions from various aspects; that of industries is naturally a fundamental one and the basis of this is the proximity of coal and economic access to iron ore and to timber. Steel plate, shipbuilding and industries allied to these take the lead, employing about one-third of the workers. The slump in 1932 resulted in much unemployment and many had to seek work elsewhere, but things improved somewhat during the war, and in 1946 an effort was made to adjust matters by the establishment of a 90-acre Trading Estate at the Hartlepools, with newly-built factories let to firms prepared to establish themselves, to whom financial assistance is also offered.

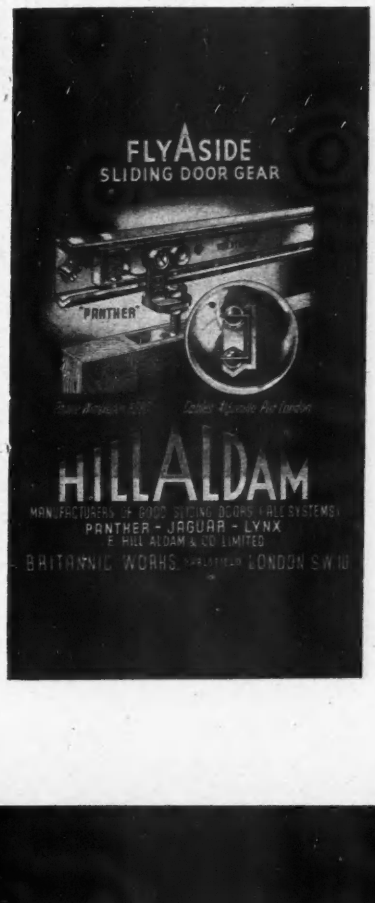
The report proceeds to deal with the general movement of population, transport, communications, etc.; then housing requirements, open spaces, educational facilities and social structure. By these routes it proceeds to the programme for reconstruction. All these surveys introduce the respective schemes for revision and remodelling. Industries are fairly definitely placed and only require minor extensions, the roads and other communications are not drastically revised, but many junctions demand roundabouts and these, together with a few widenings and satisfactory provision for a civic centre, at present lacking, will suffice to put this element of the programme in order.

Much of the housing is obsolescent and over-congested, so that for some areas only clearance, replanning and reconstruction will meet the case. The main demand in the matter of parks and recreation grounds is for a comprehensive scheme linking these together so that they shall appear more dominant in the general civic pattern. In addition to this some of the marginal areas are claimed for reservation. One may venture to express a doubt as to some of Miss Sylvia Crowe's selections for tree-planting, as these are claimed to be specially suitable for an exposed coastal district. Black and grey poplars are not good in towns by reason of their wide spreading roots near the surface level; sycamores are acutely sensitive to salt-bearing winds and the useful types of Euonymus, Ilex and Macrocarpus are omitted.

The shortages in schools and the even greater ones in their playing fields are noted, and the measures required for additions and general reorganisation are laid down, including the resiting of the Technical College and its expansion, the provision of a County College, and of clinics, youth centres and other adjuncts to education. The Health Services are given detailed study and a number of recommendations made; the same may be said of the somewhat complex features of the town's social organisation.

Particular attention is given to the preservation and development of Seaton Carew as a coastal resort, the character of the old Hartlepool headland, and of the villages in the neighbourhood of West Hartlepool: one specially notable is that of Elwick, charmingly placed around its open green. The Report closes with a chapter on the methods for the implementation of the plan.

* "The Hartlepools: A Survey and Plan." by Max Lock. Quarto. 30s. Published by Dennis Dobson, Ltd., 12, Park-place, St. James-street, S.W.1.



R.I.B.A.

ELECTION OF MEMBERS

On January 11 the following members were elected to the R.I.B.A.:—

As FELLOWS (7).—J. H. Alleyn, B.Arch. (L'pool), (Merstham); T. S. Cordiner (Glasgow); W. M Goodesmith, A.M.T.P.I. (London); D. C. H. Jenkin, B.A. (Arch.) (Lond.), A.M.T.P.I. (London); J. W. M. Mansel, T.D., Dip.Arch. (L'pool) (Windlesham); E. B. Tyler (Chichester); C. G. White, F.R.I.C.S. (Thames Ditton).

As ASSOCIATES (56).—F. W. Barber (Hadnall); E. D. Beazley (Miss) (London); H. J. Blake (Hitchin); G. L. Boswell (Breaston, nr. Derby); C. M. Bowman (Mrs.) (Manchester); H. W. K. Boyd (East Croydon); J. K. Brown (Carlisle); A. G. Capey (Stoke-on-Trent); R. E. Carter (Shirley); L. Chandler (Portsmouth); M. B. Corrie (Miss), B.A. (Sheffield); J. E. Cowper (Kidderminster); S. Cox (Miss) (North Harrow); B. R. Davis (Liverpool); N. F. Duncan, B.Arch. (Rand), (London); J. H. Edwards (West Bromwich); R. Eggleston (Sunderland); K. H. Evans (Liverpool);

R. H. Fogg (Ambergate); J. H. Foxall (Taffs Well); J. Frears (Carlisle); N. J. Goom (Lowestoft); A. J. Gordon, Dip.Arch. (Dist.), (Wales); J. L. Greenwood (Guildford); E. M. Grindley (Miss) (Stone, Staffs.); P. H. Hatton, Dip.Arch. (Lond.); I. G. McH. Hay (Inverness); J. A. Hepburn, B.A. (Arch.), (London); G. D. L. Hughes, Dip.Arch. (Wales); K. Z. Hussain (London); S. M. Igel (London); E. F. Jones (Holyhead); K. J. King (Birmingham); R. S. H. King (London); W. Knight, Dip.Arch. (Dist.), (Liverpool); G. Lang (Preston); E. Levin (London); F. D. Lindley (Sheffield); W. Lobban (Renfrew).

J. L. Moreton (London); R. S. Mortimer (Bradford); A. C. Newland (Stafford); R. H. D. Park, B.A. (Sheffield), (Lincoln); R. A. Pistorius, Dip.Arch. (Rand), (London); J. K. Robertson (Welwyn Garden City); P. H. Rodgers, B.Arch.(Hons.), (Liverpool); G. A. Saville (Selby); G. F. B. Simkins (London); J. E. Smith (High Wycombe); C. G. Snelson (Northenden); J. S. S. Snel (Purley); H. V. Sprince (London); W. H. G. Stenson, M.C. (London); A. K. Sutton, B.Arch. (L'pool), (Wallasey); F. A. De L. Williams (Miss) (London); P. Woolfenden (Stockport).

As LICENTIATES (14).—T. T. Allen (Rochester); H. J. Dicketts (Northfleet); C. Hadfield (Sheffield); C. G. Harmer (London); H. J. Lynn (Hounslow); A. M. Millwood, M.C. (Sutton); L. P. Murphy (Richmond); W. L. Reeve-Smith (Pinner); H. H. G. Roberts (London); F. A. R. Staples (London); E. H. Swaine (New Malden); K. A. Turner (London); F. W. E. Vanstone (London); B. Woodiwiss (Lincoln).

Ministry Supports Bristol's Plans.

The Ministry of Town and Country Planning is supporting the Bristol City Council in its plans to redevelop Broadmead as a central shopping area and has confirmed the Council's refusal to permit the building of a number of temporary shops and one permanent shop in and around Wine-street and Castle-street. Forty appeals from firms which had been refused permission by the council to build shops have been dismissed on the grounds that the establishment of such shops, whether on a permanent or a temporary basis, would adversely affect the proposed redevelopment of Broadmead and thus hinder the proper replanning of the centre of Bristol.

Honour Awards for American Architects.

The 8,000 members of The American Institute of Architects have been notified that for the first time a National Honour Awards programme has been set up to designate the best residences and schools completed in the past four years.

The first annual programme will be judged and the winners announced at the 81st annual convention of The American Institute of Architects, which will be held in Houston, Texas, beginning on Tuesday, March 15. This year's event will be confined to residential and school construction and in succeeding years other classes of building types will be judged.

INDUSTRIAL RELATIONSHIPS

EMPLOYERS' RESPONSIBILITIES

MR. D. C. BURGESS, M.I.O.B., addressed the London Rotary Club on January 12, at the Connaught Rooms, on "Humanity in Industry." Following is a summary of his remarks:—

The settlement of disputes in industry is now considered a matter of proper organisation and almost mechanical procedure—a dehumanised process. It is what we call industrial machinery. This machinery is invaluable in existing circumstances, but its very existence emphasises the idea of the side, and what one side proposes the other is almost in duty bound to oppose.

The employers resent the fact that the operatives have become adult members of the industrial family. Operatives, on the other hand, judge the present intentions of the employers by their experience of the past. The problem will not be solved by bigger and better organisation. The solution can only come from a change of heart. Have you ever considered what living the life of an operative may mean? Only by real appreciation and understanding can employers ever succeed in finding a solution to the problem of how every human being in this country can achieve a proper satisfaction in living his or her life.

We, as employers, have an awesome responsibility. We have the responsibility of organising our business so that the only life on earth our operatives, our own fellow men, can expect to live is either happy or sad. Look for a moment at the job of the operatives. Would you consider it a much less tedious job to spend eight hours a day, five and a half days a week, for the rest of your life, bending down and picking up a brick and bedding it next to another almost identical brick than, say, picking oakum? Consider now the difference it would make if instead of being bricklaying machines you were part of a team building houses or palaces. It is not the physical exertion that makes "hard labour" hard. It is the mental attitude of the individual who is engaged upon the task.

We want our men to feel that they are working in a team with us and are essential to us as we are to them. We want the feeling of accomplishment to be so deep-rooted that every one of the jobs on which they have been engaged rests in their minds as a job they have done, rather than a couple of years of drudgery to enable some firm to make a profit.

The qualities of mankind are best displayed, in fact they really only operate, with the development of companionship born out of sincerity, trust and friendship. But where is the companionship on jobs to-day? This desire to mean something to someone is generally expressing itself in a desire for legislation to make so-called "joint consultation" compulsory. Unfortunately, when conditions are arbitrarily imposed they bring about a completely false state of affairs. Although by means of compulsory joint consultation we may produce a façade, it can never become more than a façade until there is a genuine desire among both employers and operatives for joint consultation to be really joint, and when once such a state of desire exists neither the façade nor even the structure will be necessary.

In my view, the first requirement, as is often suggested, is not that the operatives must co-operate with the employers. The employers must first get down off their hobby horses and meet the operatives as fellow men. I plead for co-operation, the co-operation which makes a man a co-worker with the manager and the shareholder in a crusade of production, not for the profits of the employer, but for the well-being of every citizen.

After Mr. Burgess' address a vote of thanks was proposed by Rotarian PERCY V. BURNETT, F.R.I.B.A.

L.M.B.A.

THE ANNUAL REPORT

THE Working Party on building operations, the position regarding incentive schemes, reorganisation of the Association's administration, and the uncertainty with which the next 12 months are viewed, are among the matters mentioned in the recently published annual report of the London Master Builders' Association.

After comments on the general situation during 1948, which is described as "a year of ups and downs," the report continues:—

"The year has also seen serious consideration being given to the new agreement by which incentives can now be operated in the industry. A review of that situation shows a somewhat mixed result. Some firms have adequately proved its great value and can show satisfactory results in higher production and lower costs. It has been realised in all phases of our economic structure that it is only by higher production and lower costs that the country can survive, and it is the duty of every citizen, whether employer or operative, to play his full part in this matter. The Association has given fully of its opinions and advice to a Special Committee of the National Federation which is trying earnestly to assist members to a proper appreciation of what incentives can really do and how they can be operated."

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After reference to the report of the Girdwood Committee upon the Cost of House-building, which "has brought out very clearly certain points which should have the close attention not only of our members but of all those concerned in any way with the house-building activities of the industry," the report mentions the setting up of the Working Party, and states: "If it achieves nothing else, it may well be the means of disabusing the minds of those who are so ready with ill-informed criticism of the industry, but it has the opportunity of going much further than that. . . . The hope may be expressed in advance that more regard will be paid to the report of the Working Party than has unfortunately been the case in respect of earlier reports, including that valuable war-time publication, 'The Placing and Management of Building Contracts.'

"In the light of the special theme which the Association has followed for the year, that of co-operation and team work in industry, it is gratifying to record that our relations with the operatives have been conducted generally in that spirit. It has, however, become increasingly clear that, as in so many other industries, so in the building industry, there has been an undercurrent of unrest which is obviously being fostered by subversive elements."

The report records the substantial administrative advances and reorganisation made by the Association, and concludes: "The Association looks a little uncertainly into 1949, but does so with at least some feeling of optimism. The President of the National Federation explains clearly (in a Christmas message to the Regional Presidents) why he has this feeling of optimism, and it should encourage the Association to go forward into the New Year with confidence. Provided there is no major upheaval, either nationally or internationally, there seems no reason why substantial progress should not be made, though this will only come with an easing of restrictions and controls. . . . Some assurance for the future is essential in order to provide the confidence by which alone the industry can advance, can take its apprentices for training for the future, can embark on new methods of construction, and can take advantage of the many forms of mechanisation and results of research which are close to hand."

A section of the report dealing with apprenticeship states that during the year the average monthly intake dropped to 84, compared with 186 in 1946 and 128 in 1947. The number of apprentices indentured in London in 1948 was 1,001, despite the fact that it has been estimated that London should absorb some 5,000 each year.

OBITUARY

The late Mr. S. Guy Sapcote.

We regret to record the death, on December 27, of Mr. S. Guy Sapcote, senior partner in the firm of William Sapcote and Sons, Camden-street, Birmingham. He was president of the Birmingham Association of Building Trade Employers from 1919 to 1921, and president of the Institute of Builders in 1927. He was particularly interested in the provision of educational facilities for the industry, and was a member of the National Certificate Committee and the West Midlands Advisory Committee for Further Education. He was recently appointed an honorary associate of the Birmingham Technical College in recognition of his services.

NATIONALISATION DENIAL

Mr. Sleeman Congratulates "The Builder"

AT a luncheon speech at Putney last week to Central No. 5 Area of the London Master Builders' Association, the president of the National Federation of Building Trades Employers, MR. F. M. SLEEMAN, congratulated *The Builder* on its enterprise in obtaining a denial from the secretary of the Labour Party that the Government had decided to nationalise the building industry.

The National Federation, said Mr. Sleeman, had not yet presented its evidence to the Government's Working Party. Nor, for that matter, had the professional bodies. And it was unthinkable that a decision on a subject of such importance would be taken in anticipation of the Working Party's report. While no one could know what the outcome of the Working Party would be, he was confident that the building industry had a good story to put before it and before the country. Since the end of the war it had done great service for the people.

Speaking of the work of the National Federation, Mr. Sleeman said: "A fresh conception is needed of its aims and objects. While it exists, of course, to protect the interests of its members—and it does great service to them in that field—it is also concerned with the need for a disciplined industry. That involves increased efficiency in the industry, more education both at craft and higher levels, better welfare conditions, more research. We have already made big advances in all these directions, and we must be prepared in these desperate days to do our share in putting the country back on its feet again. We have to study the interests of all, not merely our own interests, and to apply our initiative and enterprise for the good of the nation."

Mr. E. O. Wilson, chairman of the area, presided.

Building and the National Economy

MR. SLEEMAN was also the guest of honour of Central No. 1 Area at a luncheon in Derry and Toms preceding its annual meeting. "The time has gone," he said, "when each individual could go his own way. Although there is a place in the industry for builders of all types, whether they are large firms or small, they must have 'rules' and endeavour to carry them out. The building trade must fit in with the national economy; it is possible for the industry to co-operate with the various Ministries and still retain its spirit of individual enterprise and initiative."

The following officers of Central No. 1 Area were elected for 1949: Chairman, Mr. L. J. Holloway, of Holloway Bros. (London), Ltd; Vice-Chairman, Mr. H. Vincent, of Bovis, Ltd.; Hon. Treasurer, Mr. W. H. Lugg, of W. H. Lugg and Co.

Economic Restraints on Building

WITH more timber and fewer restraints on trade the building industry could build more houses this year, said MR. SLEEMAN, at the annual general meeting of the Eastern Federation in Cambridge on January 13.

"The 1948 figures for house-building," said Mr. Sleeman, "over 200,000 new houses in eleven months, show that the building industry is settling down after the war-time upheaval, and is well capable of meeting increased demands. Had the economic position enabled more timber to be imported, and had the private builder been given a freer hand, I am satisfied that that 200,000 figure would have been exceeded considerably last year. For builders would have been only too willing to give up other work in order to build more houses, with the necessary ancillary buildings, for those who needed them."

Current Employment Figures.

During November there was a fall of 14,000 in the number estimated to be employed in building and civil engineering whose total was 1,362,000. The number engaged in the production of building materials remains unaltered at 587,000.

Institute of Fuel.

The Institute of Fuel has published its "1948 List of Officers, Council and Members, Extracts from By-Laws, List of Published Papers." It may be obtained from the Institute at 18, Devonshire-street, W.1.

Speaking Signal.

A device which may be used in many fields in industry was demonstrated at the factory of E.M.I. Factories, Ltd., recently. It is a speaking signal which, it is claimed, can be applied to every kind of scientific measuring or controlling instrument as a link with the danger or datum line. The medium whereby the spoken messages are reproduced is magnetic "tape." The demonstration showed how the device could be synchronised with traffic lights as an aid to road safety. It will be manufactured by E.M.I. Factories, Ltd., and marketed by Speaking Signals, Ltd., the patentees.

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THE HOUSE LONGHORN BEETLE

DAMAGE IN SURREY

REPORTS have recently appeared in the daily and technical Press of extensive damage by the house longhorn beetle, *Hylotrupes bajulus*, to structural woodwork in houses in many parts of the country. Whilst these indications of widespread occurrence of this insect are not confirmed by the records of infestation of timber by insects, including this longhorn beetle, kept at the Forest Products Research Laboratory, there have in fact been during the last few years an unusual number of instances of damage by it in some parts of Surrey. The sanitary authorities in the areas concerned and in neighbouring districts have been asked to keep a look out for signs of attack, particularly in the roofs of buildings, and to report any cases of infestation or suspected infestation which they find or which may be brought to their notice.

The origin and rate of spread of these recent, but more or less localised, outbreaks are not fully known, and it is with the object of obtaining additional information on these points, as well as of ensuring application of the most efficient methods of control, that particular attention is being given by the Laboratory, acting in co-operation with the Ministry of Health and the authorities directly concerned, to instances of infestation which come to its notice.

The house longhorn beetle has long been known to appear in this country but has hitherto not been regarded as an important timber insect. In the Baltic countries, on the other hand, notably in North Germany, Denmark and Sweden, it is responsible for serious damage to the sapwood of softwood building timbers and is a well-known pest of such structural woodwork in houses; recently, also, attention has been drawn to extensive attack in buildings in parts of South Africa.

In view of the prevalence of the house longhorn beetle in these and other countries, in some of which the treatment of infested woodwork is compulsory, it is all the more necessary that precautions be taken to prevent its increase and the spread of infestation in Great Britain, even although at present it is far less abundant and apparently much more restricted in its distribution in this country than such common wood-boring insects as the furniture beetles and *Lyctus* powder-post beetles.

An illustrated leaflet describing the house longhorn beetle and its grub, and the type of damage it causes in seasoned softwood timbers, can be obtained free of charge from the Director, Forest Products Research Laboratory, Princes Risborough, Aylesbury, Bucks.

National Insurance Cards.

The green National Insurance cards end on March 6, and are due to be exchanged before March 13. These cards have the letter "A" printed on the front page above the period of currency, and also after the insured person's National Insurance number. Employers are asked to take, or send, the green "A" cards of their staff and their own cards, if green, in bulk to a local National Insurance office during the week beginning March 7. They will then receive new cards for the 52 weeks beginning on March 7. Only where exchange in bulk is not possible should the green cards be given to employees to exchange personally.

TIMBER & ECONOMICS

T.D.A. MEMORANDUM

THE Timber Development Association has submitted to the President of the Board of Trade a memorandum drawing attention to certain consequences of the policy of substituting manufactured materials for timber. It is pointed out that the restrictions at present placed on the import and use of timber are due to a stringency in foreign exchange and not to any shortage of world supplies. Suggestions are offered for easing currency difficulties; the relationship between timber and steel, concrete, coal and aluminium being examined to this end.

During the war the deficiency of timber imports was met by the exercise of a rigid economy in the refinement of design, the elimination of wasteful forms of construction, the prohibition of the use of timber for non-essential purposes, and the use of substitute materials. The Association points out that the methods appropriate to war-time conditions are not suited to the economic climate of post-war industry, and that while the useful limit of economy has probably been reached by economical design, the extended use of substitutes now defeats its own object.

Experience has shown, says the Association, that the main disadvantages of the manufactured substitute are:—An increase in production costs leading to increases in the cost of living, demands for higher wages and other symptoms of inflatory pressure; the diversion of manufacturing capacity from export to domestic consumption; the indirect increase of dollar expenditure on substitute materials.

After claiming that the use of substitute materials is one of the most important contributory causes of increased building costs, the Association submits that economic conditions are such as to demand not only the reversal of the policy of using substitutes for timber, but the extension of the use of timber to new applications which have in the past been reserved to steel, reinforced concrete and aluminium.

On January 17 a statement on the Association's policy was made by MR. T. A. STOREY and MR. J. T. BAYNES at a gathering of representatives of allied industries and professions, at the Savoy Hotel. This policy is also outlined in a booklet entitled "The Economics of Timber Substitution," which may be obtained from the Association at 75, Cannon-street, E.C.4.

NEWS IN BRIEF

Private Enterprise Not Wanted.

A further attempt to have work at Bradford done by private enterprise instead of by direct labour failed at the January meeting of the city council.

Rebuilding in Italy.

The Italian review "Edilizia Moderna" is to publish a special issue dedicated to a regional investigation about reconstruction, in order to give a clear perspective of the whole problem from the technical as well as the economical standpoint. The investigation aims to examine the conditions of Italian regions at the end of the war, what has been done until now and what has still to be done with reference to reconstruction. Well-known personalities, chosen among Italian professional technicians, have been called to contribute to this work.

The problem of reconstruction has also led to a National Competition for Building Revival, held recently, for which the Società del Linoleum of Milan has offered a prize of 5 million lire. The object of this competition is the formulation of a study leading to the solution of the Italian rebuilding problem, within the limits of the general reconstruction of the country, having consideration for its technical, economical, financial and social standpoints.

L.M.B.A. Donation to Building School.

The London Master Builders' Association has sent a donation of five guineas to the Hammersmith School of Building for its Prize Fund. Prizes will be presented by Sir Lancelot Keay, K.B.E., PP.R.I.B.A., at the ceremony in the Hammersmith Town Hall on February 9.

Science and Industry.

All firms and individuals interested in the manufacture and use of iron and steel, but not themselves makers or processors, will now be admitted to a newly established category of Associate Membership by the British Iron and Steel Research Association.

Control of Advertisements.

The Ministry of Town and Country Planning and the Department of Health for Scotland have published an explanatory memorandum on Town and Country Planning (Control of Advertisements) Regulation, 1948 (H.M. Stationery Office, 3d. net).

TIMBER FROM POLAND

The President of the Board of Trade announces the signature in Warsaw of a 5-year trade and finance agreement with Poland under which there is foreseen an exchange of goods up to the end of 1953 of about £130 million each way, including supplies from Poland on an increasing scale of foodstuffs, agricultural products and timber, and the purchase by Poland of raw materials and manufactured goods, including capital equipment. In the case of timber, Poland accepts a firm commitment for 1949, and for a three-year period from 1949 to 1951, and has undertaken to do her best to reach the targets for softwood and pit props in particular which are specified in the agreement.

TECHNICALIA

METALWORK. By Donald Smith (B. T. Batsford, Ltd.) 7s. 6d. net.

This is a fascinating and informative work, concise and well planned. The art of metalworking is traced from its early beginnings, starting with the end of the so-called Stone Age which, as the author rightly points out, has never ceased.

The gradual development of the industry is briefly but adequately outlined through successive stages, dating from the copper and bronze periods of the Egyptians, Persians and Romans to the iron and steel time in which we now live. Iron and steel work is traced through early Gothic, late Gothic, Tudor and Stuart, Wren and Tijou and eighteenth-century periods to the present time. An interesting chapter is devoted to swordsmiths' and armourers' work of earlier days.

Goldsmiths' and silversmiths' arts are also referred to, including the production of jewellery, silver and gold plate. Here again progress is followed through many periods from early British to Victorian periods.

More commonplace manufactures, such as fire-grates, hearth furniture, candlesticks and other lighting appliances are not forgotten, and the book concludes with a short reference to the work of pewterers.

SOLID AND LAMINATED WOOD BENDING. By W. C. Stevens and N. Turner. (H.M. Stationery Office.) Price 5s.

Research on a considerable scale has been carried out by the Forest Products Research Board on the subject of wood bending, and the authors have now gathered and compiled a mass of valuable information as a result of this research and from experience gained by them in examination of factory methods, and in solving numerous problems propounded by manufacturers of furniture and sports goods, aircraft manufacturers, boat builders and other users of bent timber.

After dealing with the stresses developed in timber during bending, an informative and useful chapter is devoted to the selection and preparation of bending materials, including a table of approximate radii of curvature at which breakages during bending should not exceed five per cent. This is followed by several very interesting chapters dealing with modern methods of, and apparatus needed for, successful bending under commercial manufacturing conditions, and, as one would expect, full consideration is given to the bending of laminated materials and to the various types of setting glues. Particular attention is directed to those glues suited to bending by moulding operations and to their individual characteristics.

The final chapter on "Theoretical Considerations," which discusses assessment of bending qualities, end pressures, tension and compression tests, minimum radius, bending moments, theoretical and actual bending values and movement of bends, concludes, in a fittingly comprehensive manner, a book of real importance to all those concerned with the manufacture of bent wood shapes of all kinds.

R. S. D.

BOOKS RECEIVED

SAWING AND PLANING. By A. H. Haydock. (Surrey: The Technical Press, Ltd.) Price 10s. 6d.

GEOLOGY APPLIED TO BUILDING AND ENGINEERING. By Arthur Bray. (London: Sir Isaac Pitman and Sons, Ltd.)

THE SCOTTISH BUILDER

SCOTTISH NEWS

Mr. Gordon Brown's Appointment

Mr. R. Gordon Brown, A.R.I.B.A., late Principal of the Architectural Association School of Architecture since June, 1945, has been appointed Professor of Architecture in Edinburgh University and Head of the School of Architecture in the College of Arts. Mr. Gordon Brown, who was born in Durban, South Africa, in 1912, was educated at Clifton College, Bristol, and Natal University. He trained at the Architectural Association School of Architecture, and was chief assistant to Sir Walter Tapper, R.A., F.R.I.B.A., and Michael Tapper, F.R.I.B.A., Professor Richardson and C. Lovett Gill, R.A., F.R.I.B.A.

Edinburgh's Town Plan.

Edinburgh's new town plan, at present in the hands of the printers, will be published by the Corporation early in the Spring. It will be a comprehensive work and will contain all the diagrammatic material shown at the exhibition held in the city when the plan was first formulated, together with additional material. Photographs of relevant scenes in the city, coloured maps and diagrams will show how the new city might one day look.

Repair of Bermuda Cathedral.

Four employees of Wm. Burton and Sons, plumbers, of Edinburgh, have left for Bermuda to repair the roof of the island's cathedral, which—to quote the words of a representative of the firm—was "sucked off" during the cyclone which hit the island in October of last year. Materials, including 3,000 sq. yds. of copper sheet, have been sent from Britain to Bermuda.

NEW BUILDINGS

Dunfermline.—Dean of Guild Court approved plans by Scottish Garden City Housing Society, Ltd., Edinburgh, for erection of 10 cottages at Cherrybank at £17,000.

Edinburgh.—Addition proposed to Chemistry Department Building of University of Edinburgh, West Mains-rd., consisting of new first-floor building as additional laboratories, at £80,000. Plans by Rowand Anderson & Partners, 16, Rutland-sq., Edinburgh.—Store for H.M. Stationery Office (M.O.W., 122, George-st., Edinburgh) at Bankhead Crossway North, Sighthill Industrial Estate. Cost, £300,000.—25 dwelling-houses proposed at Craigour-dr. at £35,555. Plans by J. A. W. Grant, 25, Rutland-sq., Edinburgh.—Addition proposed at Standard Life Assurance Co. at 7, George-st. at £75,000. Agents: Dundas & Wilson, C.S., 16, St. Andrew-sq. Plans by Dicke Peddie, McKay & Jamieson, 8, Albyn-pl.—Alterations for British Sailors' Society Incorporated (680, Commercial-rd., London) at Leith Sailors' Home, Tower-pl., Leith. Cost, £27,000. Agent: R. Arnott Duncan, S.S.C., 16, Walker-st. Plans by A. J. Morrison, 30, Ferryhill-pl., Aberdeen.

Edinburgh.—From plans by their architects the Leith Provincial Co-operative Society, Ltd., 22, Bangor-st., will erect new warehouses at £180,000.

Glasgow.—Corporation to erect at Shawhill-st. new dining department for schools from plans by John MacNab, 129, Bath-st., Glasgow.—Alterations and additions proposed at 52 to 58, Victoria-rd., from plans by MacDowall, Morrison & Co., 3, Murray-st., Glasgow.—Corporation to carry out additions at Kingston Halls at £25,000.

Glasgow.—Office buildings to be erected for C. F. Sachs & Co., Ltd., 27 to 35, Stockwell-st., for which the architect is A. H. MacCartney, 96, Henderson-rd., Bearsden.—Alterations and additions proposed for J. Taylor & Co., Ltd., Bridgeton, at Cotton-st., for which the architect is Magnus Duncan, 243, Eglinton-st., Glasgow.

Stirlingshire.—Plans in hand for scheme of extensions estimated at over £490,000, consisting of new departments to the British Aluminium Works at Falkirk, for which the architect is N. Fyfe, 9, Rosebery-cres., West End, Edinburgh.

FUTURE CONSTRUCTION

PUBLIC APPOINTMENTS

Full details of Public Appointments open will be found in the Advertisement pages of this and previous issues.

CONTRACTS OPEN

For some contracts still open but not included in this list see previous issues. Those with an asterisk are advertised in this number. The dates at the heads of paragraphs are those for the submission of tenders; a dagger (†) denotes closing date for applications; the name and address at the end refer to the person from whom particulars may be obtained.

BUILDING

JANUARY 26.

†***Hythe T.C.**—Five pairs of houses at Springla. B.S. Dep. £2 2s.

JANUARY 27.

†**Wilmslow U.D.C.**—28 houses at Lacy Green estate. C., Council Offices. Dep. £2 2s.

JANUARY 28.

†***Crawley Development Corporation.**—M.O.W. hutted office accommodation and boiler-house at Main Offices, Broadfield. Chief A.

†***East Sussex C.C.**—Kitchen and dining-room at Newbury-la., Cuckfield. E. A. Verger (F.), County A., County Hall, Lewes. Tenders by March 4.

Rugby R.D.C.—(ā) Six houses Brinklow scheme; (b) 4 houses Wibtoft scheme; 4 houses Burton Hastings scheme. S., 24, Warwick-st. Dep. £1 1s. each scheme.

JANUARY 31.

***Barking T.C.**—18 flats, London-rd. Boro' Architect. (Above date is for return of applications.)

†***Bath T.C.**—Superstructure of new Junior and Infants' School at Fosseway. Ernest Tew & Oliver, 7, Northumberland-bldgs., Bath. Dep. £3 3s.

***Halifax C.B.**—Work in reinforced concrete for erection of workshop and laboratory at Technical College Annexe, Hopwood-la. B.E. Dep. £2 2s.

Hemel Hempstead R.D.C.—10 houses at Buckwood-rd. E. & S., 2, Marlowes. Dep. £2 2s.

†**Lancs C.C.**—Two police houses at Thickwood Moss-la., Rainford. County A. Dep. £2.

†**Lancs C.C.**—Nine police houses at 3 sites. County A. Dep. £2 each site.

†**Lancs. C.C.**—Day nurseries at Cemetery-rd., Audenshaw. County A. Dep. £2 (cheque only).

Sodbury R.D.C.—12 houses with site works, etc., at 2 sites. S., Council Offices, Chipping Sodbury.

†***Strood R.D.C.**—92 houses at Park site, Stonehouse. G. E. G. Gadsden, C., Council-chbrs., John-st. Dep. £2 2s.

FEBRUARY 1.

***Ashby-de-la-Zouch R.D.C.**—Six houses at Ravenstone. V. G. Bott, A.I.A.A. & S., Architect & E., Council Offices, South-st. Dep. £2 2s.

***Ashby-de-la-Zouch R.D.C.**—Ten houses at Heather. V. G. Bott, A.I.A.A. & S., Architect & E., Council Offices, South-st. Dep. £2.

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Bridgwater R.D.C.—4 houses at Lyng-Gallannaugh & Nicholls, 41, St. Mary-st. Dep. £2 2s.

***Bromley T.C.**—Conversion of war-damaged buildings into 2 self-contained flats and changing accommodation at Public Golf Course, Magpie Hall-la. B.E. Dep. £2 2s.

†***Carmarthenshire C.C.**—Infants' school at Llwynhendy. W. T. Lloyd (A.), County A., County Hall, Carmarthen. Dep. £5.

†***Oxford T.C.**—58 houses at Northway estate. E. G. Chandler (A.), City A., Town Hall. Dep. £2 2s.

†***Surrey C.C.**—Six-classroom school in hutted construction for Benhilton C. of E. Primary School, Angel Hill, Sutton. County A., County Hall, Kingston-on-Thames.

***Surrey C.C.**—School canteen at Eccleslea site, Vicarage-la., Shottermill, nr. Haslemere. County A., County Hall, Kingston-on-Thames. Dep. £2 2s.

FEBRUARY 3.

Narberth R.D.C.—Eight houses at 2 sites. C., Council Offices. Dep. £3.

FEBRUARY 4.

Bowland R.D.C.—Three pairs of houses at Gisburn. Needham & Thorp, architects, 6, High Petergate, York. Dep. £2 2s.

†**Hexham U.D.C.**—16 houses for aged at St. Cuthbert's-la. J. Walter Hanson & Son (LL.), 123, Northumberland-st., Newcastle-on-Tyne. Dep. £2 2s.

FEBRUARY 5.

†***Coventry T.C.**—14 bungalows, 93 houses and 17 garages at Fletchamstead Highway estate. D. E. E. Gibson, City A., 1a, Warwick-row. Dep. £3 3s.

FEBRUARY 7.

Crewe T.C.—14 houses at Davenport-ave. site. B.E. & Architect, Municipal-bldgs. Dep. £2 2s.

***Orpington U.D.C.**—Additions at Knockholt Village Hall. E. & S., Bark Hart, 46, Barkhart-rd. Dep. £2 2s.

Walsall T.C.—Eight police houses at 3 sites. E. & S., Council House. Dep. £3 3s.

FEBRUARY 11.

***Cambridge T.C.**—84 houses at Newmarket-rd. (West) site. B.S., Guildhall. Dep. £5 5s.

Denton U.D.C.—20 houses at Lees House Farm site. E. & S., Town Hall. Dep. £2 2s.

Manchester T.C.—Police Section House at Solway-rd., Wythenshawe. City A. Dep. £1 1s.

FEBRUARY 12.

***Billericay U.D.C.**—Contract No. 6, 8 houses at Billericay. Contract No. 5, 8 houses at Pitsea site. S., Council Offices. Dep. £2 2s.

***Petworth R.D.C.**—20 houses at Hampers Green. F. J. Hodgson (L.), 2, Chertsey-st., Guildford. Dep. £2 2s.

Stroud U.D.C.—46 houses at Ebley. Council-chbrs.

FEBRUARY 14.

†***Beddington and Wallington T.C.**—Six flats, Park-la. and 8 flats, Bridge-rd. C. Peter Clarke, T.C. Dep. £2 2s.

Horncastle R.D.C.—18 houses with site works at 3 sites. Saunders & Partners, architects, 24, Castle-gate, Newark-on-Trent. Dep. £2 2s.

FEBRUARY 16.

***Bournemouth C.B.**—17 houses, Howeth-rd. Boro' A. Dep. £2 2s.

***Chesterton R.D.C.**—79 houses in 3 parishes. H. Jackson (A.), 93, Hartington-gr., Cambridge. Dep. £2 2s. each site.

FEBRUARY 18.

†***Sutton and Cheam T.C.**—Eight houses at Sutton Common-rd. Boro' A. and S., Municipal Offices, High-st. Dep. £5 5s. Tenders by March 15.

FEBRUARY 22.

***Manchester T.C.**—594 houses and cottage flats in 4 contracts at Moss Nook and Woodhouse Park area, Wythenshawe. Housing Dept., Town Hall. Dep. £2 2s. each contract.

FEBRUARY 23.

***Brighton C.B.**—16 houses Section 1F and 62 houses Section 4A at Lower Bevenden estate. B.E. & S., 26/30, King's-rd. Dep. £2 2s. each section.

Runcorn U.D.C.—20 houses at Castle Rise estate. E. & S., Town Hall. Dep. £2 2s. (cheque only).

NO DATE.

***Penge U.D.C.**—Application for construction of 86 flats. W. T. Kaile, C., Town Hall, S.E.20.

PAINTING, ELECTRIC LIGHTING, MATERIALS, ETC.

JANUARY 31.

Bedford T.C.—B.E. & S. (Materials).

FEBRUARY 1.

Stamford T.C.—B.E. & S. (Materials).

FEBRUARY 5.

Ashford (Kent) U.D.C.—S. (Materials).
Felixstowe U.D.C.—E. & S. (Materials).
Swansea C.B.—B.E. & S. (Materials).

FEBRUARY 7.

St. Marylebone T.C.—T.C. (Materials).
West Bridgford U.D.C.—E. & S. (Materials).

FEBRUARY 9.

Carmarthenshire C.C.—County E. & S. (Materials).
Dewsbury C.B.—B.E. (Materials).
Mansfield T.C.—B.E. & S. (Materials).
Pembrokeshire C.C.—County S. (Materials).

FEBRUARY 11.

***Wembley B.C.**—Internal decorations to 300 houses at Manor Farm estate, Alperton; 312 houses and 96 flats at Christchurch estate, Alperton; and 163 houses and 39 flats at Kingsbury estates. Boro' Treas. Dep £1 1s.

FEBRUARY 12.

Dorset C.C.—County S. (Materials).
Enfield U.D.C.—E. & S. (Materials).

FEBRUARY 14.

Bebington T.C.—B.E. & S. (Materials).
Frimley and Camberley U.D.C.—E. & S. (Materials).

FEBRUARY 19.

Kidderminster T.C.—B.E. & S. (Materials).

FEBRUARY 21.

Northumberland C.C.—County S (Materials).

FEBRUARY 25.

Padiham U.D.C.—S. & Water E. (Materials).

FEBRUARY 26.

Whitchurch U.D.C.—E. & S. (Materials).

FEBRUARY 28.

Rotherham R.D.C.—E. & S. (Materials).

ROADS, SEWERAGE AND WATER WORKS

FEBRUARY 1.

†**Border R.D.C.**—Construction of Dalston sewerage and sewage disposal. C., Council Offices, 7, Victoria-pl., Carlisle.
Harrow U.D.C.—Roads and sewers at Grove estate, Pinner. E. & S., Council Offices, Uxbridge-rd. Dep. £2.

FEBRUARY 4.

Alton R.D.C.—Roads and sewers at Medstead housing site. E., Council Offices, Barton End. Dep. £3 3s.
Gravesend T.C.—Roads and sewers at Parrock Farm site. B.E. & S. Dep. £2 2s.

FEBRUARY 5.

Havant and Waterloo U.D.C.—Roads and sewers at Site No. 4, Forest-end. E. & S., Council Offices, 1, Park-rd., North. Dep. £2 2s.

FEBRUARY 9.

Andover T.C.—Reconstruction of sewage pumping station and extension of disposal works. B.S. Dep. £5 5s.
Hornchurch U.D.C.—Advance preparation of housing estates. E. & S. Dep. £2 2s.

FEBRUARY 14.

Epsom and Ewell T.C.—Extensions and alterations at Ruxley sewage disposal works. B.E. & S., Town Hall. Dep. £5 5s.

FEBRUARY 15.

***Barton-upon-Humber U.D.C.** — Street and sewers at Tofts-rd. estate. J. M. Bott, C., Council Offices. Dep. £3 3s.
Freebridge Lynn R.D.C.—Laying of water main in 2 parishes. C., 11, King-st., King's Lynn. Dep. £5 5s.
Garforth U.D.C.—Roads and sewers, etc. E. and S., Council Offices. Dep. £2.
Nant Conway R.D.C.—Two covered concrete service reservoirs, etc., for Conway Valley water scheme. T. B. Farrington & Son, 18, Trinity-sq., Llandudno. Dep. £5 5s.
Sturminster R.D.C.—2,340 lin. yds. of 9-in. and 2,370 lin. yds. of 7-in. dia. sewers, etc., at Okeford, Fitzpaine. Lemon & Blizard, Lansdowne House, Castle-la., Southampton. Dep. £3 3s.

FEBRUARY 16.

Brixworth R.D.C.—1,300 yds. of 6-in. dia. pipe sewer at Cold Ashley. Pick, Everard, Keay & Gimson, 6, Millstone-la., Leicester. Dep. £2 2s.
Tamworth R.D.C.—Construction of Hurley sewerage and sewage disposal works. C., 92, Lichfield-st. Dep. £3 3s.

GENERAL BUILDING WORK

(LONDON)

Camberwell. — Dwellings. — B.C. submitted plans to L.C.C. for 29 dwellings at Barry-rd. W. Bell, B.E. & S.
Fulham.—Temp. Housing.—B.C. to acquire sites at 14, 15 and 18, Favart-rd., and 43-49 (odd) and 56-64 (even), Edith-rd., for temp. housing.
Shoreditch.—Housing.—T.C. propose development of Fanshaw-st. area for housing, subject to L.C.C. approval. Architect's Dept.
Shoreditch.—Housing.—B.C. to purchase following sites for housing purposes: 2, 18, 22, 24, Harvey-st.; 15, 25, Holt-pl.; 61, Hyde-rd.; 72, 78, 80, 82 and workshop rear of 45, Whiston-rd.
South Kilburn.—Neighbourhood Unit.—Proposed by Willesden B.C. in area bounded by Cambridge-ave., Canterbury-rd. and Salisbury-rd.

(PROVINCIAL)

Aspull.—U.D.C. propose 150 houses. U.D.C. applying for sanction to borrow £10,000 for 8 houses, Hilton Farm estate.
Bangor (North Wales).—Chester, Wrexham and North Wales Savings Bank, 100, Boughton, propose branch bank and manager's flat at 307, High-st. Douglas Minshull & Co. (F.), 6, Abbey-sq., Chester. T.C. propose repairs, etc., to the Pier
Barrow-in-Furness.—E.C. propose prim. sch. at South New Barns.
Bedford.—T.C. to apply to M.H. for sanction to borrow £69,970 for purchase of land at Aylesbury-rd. and Hatfield-cres. for erection of 50 houses.
Birmingham.—9 permanent church halls to be built on new housing estates by Diocesan Forward Movement at £30,000.
Bishop Auckland.—U.D.C. approved layout plans by S. for 1,250 houses at Woodhouse Close estate.
Bishop Auckland.—Developments to Bishop Auckland General Hospital at £30,000 planned by Newcastle-on-Tyne Hospital Board, Osborne-rd., Newcastle-on-Tyne.
Blackburn.—T.C. propose:—Nurs. sch. at St. James'-rd. and Deganwy-ave.; adaptation of St. Chad's Mission Church, Pleckgate-rd., for extension of Four Lane Ends prim. sch. T.C. propose crematorium and chapels at Pleasington Cemetery.
Boldon.—U.D.C. received allocation of 150 houses. Plans by S., N. Hindmarch, Council Offices.
Bubbenhall.—P.C. propose village hall.
Burnley.—T.C. propose nurs. sch. adjoining Greenock-st.
Caernarvon.—T.C. approved houses at Cae Mur. T.C. propose 56 houses, Maes Barcer estate.
Carlisle.—Gretna Lodge of Freemasons propose rebuilding Gretna Hall. Johnston & Wright, architects, 13, Castle-st.
Cheadle (Staffs).—R.D.C. propose 24 houses at Weston Coyney estate. Layout approved for 129 houses, 6 shops, garages, community centre and sch.
Chester.—John Summers & Sons, Ltd., Hawarden Bridge Ironworks, Shotton, propose extensions to works. Dean and Chapter of Chester Cathedral propose repairs at £31,550. B. Miller (F.), 3, Abercromby-sq., Liverpool 1. Chester and District Hospitals Management Cttee. propose out-patients' department and night nurses' hostel at Chester Royal Infirmary. E.C. propose adaptations at Blacon prim. sch. and a new infs.' sch. at Blacon.
Cork.—T.C. to build 150 houses at Ballyphehane this year, and to acquire and develop sites for further 250 houses there in 1950.—T.C. to build 150 houses at Bakers-la. and 150 at Spangs-hill.—T.C. to acquire sites for housing at 4 sites.
Crewe.—M.H. consented to borrowing of £10,401 by T.C. for land at Wistaston Green estate for housing.
Daventry.—R.D.C. received allocation of 70 houses (10 by private enterprise).
Doncaster.—E.C. propose tech. high sch. at Sandall Beat-rd.
Dudley.—T.C. propose tech. coll. and tech. day sch. at £145,000.
Felling (Co. Durham).—Page, Son & Hill, 75, King-st., South Shields, are architects for proposed mod. public-house at Heworth-la., Felling, for R. Fenwick & Co., 176, High-st. West, Sunderland.
Flixton.—Walker & Homfrays, Ltd., Woodside Brewery, Eccles New-rd., Salford 5, propose hotel at Irlam-rd.
Gosport.—M.H. have allocated 102 houses for the year.
Grantham.—M.H. have allocated 120 houses this year.
Halesowen.—F. Smith, Ltd., Aston Model Brewery, Aston Cross, Birmingham 6, propose hotel at Fatherless Barn estate, Cradley. T.C. propose community hall at Kent-rd., Lapal.
Keighley.—T.C. received allocation of 60 houses (10 by private enterprise).
Leamington Spa. — Regional Hospitals Management Cttee. propose extensions to Warneford General Hospital. Martin & Martin & W. H. Ward (F/F.), 106, Colmore-row, Birmingham 3.
Limehurst.—Lancs. E.C. propose nurs. sch. at Store-st., Waterloo.
Liverpool.—Housing Cttee. accepted recommendations by City A. for 359 flats at central areas.
Liverpool.—R.C. authorities propose sch. at Litherland.
Llwyn.—Welsh Board have allocated 40 houses this year.
Manchester.—City C. may seek compulsory purchase of 3 sites for 159 flats.
Manchester.—T.C. propose new police station at Hall-la., Baguley; sch. canteen at Hague-st., Newton Heath; erection of prefabricated units for extensions to various schools; adaptation of Woodlawn, Mersey-rd., Fielden Park, Didsbury and Forrest Hill, South Downs-rd., Bowdon, for hostels for Welfare Cttee.
Mansfield.—Hospitals Management Cttee. propose extensions to Mansfield General Hospital. Vallance & Westwick, architects, White Hart-st.
Matlock.—Starkholmes Village Hall Bldg. Cttee. propose village hall at recreation ground. Derbys. C.C. propose fire station at The Firs site.
Merthyr.—Welsh Board have allocated 114 houses this year.
Middleton.—T.C. approved: Five shops, Mount-rd., Kirkway, Alkrington, for A. Redfern & Sons, Ltd., Builders, Fields New-rd., Chadderton, nr. Oldham; bungalows and garages, Manchester Old-rd., for Ashton Smethurst (Builders), Ltd., Suffield-st.
Newcastle (Staffs).—T.C. approved alterations to Brown Jug for G. Pim & Co., Adams & Edwards, architects, 3, Brook-st., Stoke-on-Trent; 4 houses, Chester-cres., for A. Hughes, T. J. Madew, architect, Marsh-chbrs., Marsh-parade; alterations, Co-operative stores, High-st., Wolstanton, Watkins & Willis, architects, N.P. Bank-chbrs., Burslem, Stoke-on-Trent. T.C. propose branch library at Silverdale; domestic science dept. at St. Giles' and St. George's C.E. sch.
Oakengates.—U.D.C. propose 36 additional houses.
Oldham.—T.C. to apply for consent to loan of £58,815 for 52 houses, Limeside estate.
Ormskirk.—C. M. Hesford & Co., Ltd., Moorgate, propose extensions to engineering works. James Martland, Ltd., Burscough Bridge, propose 2 agricultural houses. Licences granted for houses in Liverpool-rd. and Orrell-rd., Burscough, to E. Kirby and W. Booth. Lancs. E.C. propose county prim. sch. at Lordsgate Township, Burscough.
Otley.—U.D.C. propose 20 houses, May Lea site. West Riding E.C. propose multilateral school at £265,800.
Preston.—Lancs. E.C. propose hostel and bathroom block at Winmarleigh Hall Farm Institute at £35,000.
Rotherham.—T.C. approved.:—Houses, Dovedale-rd., for Charlton & Holmes; factory, Greasbrough-rd., for I. & I. Walker; houses, Dovedale-rd., for E. S. Allen. E.C. propose prim. sch. at Grange Mill-la. Rotherham and

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Mexborough Hospitals Management Cttee. propose operating theatre and X-ray block and resident medical officers' block at hospital, Doncaster Gate.

Rowley Regis.—M.H. allocated 200 houses this year.

Sale.—T.C. propose 72 houses off Cumberland-rd. and Grasmere-rd.

Salford.—T.C. approved:—Factory, Duchy-rd., Pendleton, for Sinclair's Steel Erectors, Ltd., Chester-rd., Old Trafford, Manchester 16. T.C. propose branch library, Cromwell-rd., Lichfield-st., and Rugeley-st., Pendleton. R.C. Authorities propose prim. sch. at Britannia-st., Douglas-green, and Irwell-st., Pendleton. Governors of Royal Tech. Coll., Peel Park, The Crescent, propose extensions.

Sheffield.—British Iron and Steel Assn. propose research station at Meadow-st. F. E. Hall & Co., Little Norton-la., Meadowhall, propose factory at Bramall-la., Sheldon-st., and Airey-st. George Barlow & Sons, Ltd., Kentons-hill, propose works at Hermitage-st. and St. Mary's-la.

Skelton (Yorks).—U.D.C. to build 50 houses.

South Westmorland.—100 houses allocated to R.D.C. for 1949.

Stevenage.—200 flats to be built. Work to begin later on 200 houses and 4 hostels.

Stockport.—T.C. have approved:—Licensed premises, Gorton-rd. and Priory-la., for Hyde's Anvil Brewery Co., Ltd., Moss Side, Manchester 16. T.C. propose central omnibus station at Daw Bank and Chestergate.

Thurrock.—T.C. seeking compulsory purchase of land for building of 100 houses this year by Shell Refining and Marketing Co.

Tynemouth.—T.C. considering erection of flats at £500,000. B.E., D. M. O'herlihy, 19, Howard-st., North Shields.

Weston-super-Mare.—Sports stadium to be built at Locking-rd. at £150,000.

TENDERS

* Denotes *accepted*.
† Denotes *provisionally accepted*.
‡ Denotes *recommended for acceptance*.
§ Denotes *accepted subject to modification*.
¶ Denotes *accepted by H.M. Government departments*.

Aldridge.—18 houses with site works, etc., at Barns-la., Rushall, for U.D.C. C. C. Gray, 15, Bridge-st., Walsall, architect. Quantities by T. Pemberton, 55, Darlington-st., Wolverhampton. *Sabin & Young, Ltd., Rushall, nr. Walsall, Staffs, £23,089.

Amble.—Showrooms for the Northern Electricity Board. Architects, L. J. Couves & Partners, Carliol House, Newcastle: *R. & C. Brown, 34, Albert-st., Amble.

Birkenhead. — Extensions at Overchurch Schools, Rock Ferry, for E.C. B. Robinson, M.Inst.C.E., B.E., Town Hall: *H. G. B. Construction Co. (Liverpool), Ltd., Moreton, Wirral, £9,136.

Blackburn.—Day nursery at Gladstone-st., for T.C. W. Pickstone, M.Inst.C.E., B.E., Town Hall: *Woof Cronshaw & Sons, Ltd., Nova Scotia Works, Blackburn (est. cost, £8,000).

Carlisle.—Extensions to factory at Shaddongate, for Linton Tweeds, Ltd. Johnston & Wright, architects, 13, Castle-st.: *M. Thompson (Public Works Contractor), Ltd., Petteril-rd., Carlisle.

Doncaster.—Day nursery at Wheatley Park, for T.C. W. W. Thomas (A.), Boro' A., Municipal Offices: *Wm. Airey & Sons (Leeds), Ltd., Eldon House, Leeds 2, £5,800.

Durham.—Further 35 houses for City Council. W. J. Green, City E.: *J. W. White (Contractors), Ltd., Sunderland (subject to M.H. approval).

Elham.—Five pairs of bungalows, together with drains, fences and small sewage plant at Stone-st., Lympne, for R.D.C. Council Offices, Lyminge, Kent:—

Geo. Parker & Sons, Ltd., Peckham, S.E.15	£17,284
O. Marx & Son, Ltd., Folkestone ...	16,775
S. Lummus, Folkestone	16,754
S. J. Sharp & Son (Hythe), Ltd., Hythe, Kent	16,672
J. B. Rose & Co., Ltd., Folkestone ...	16,586
S. A. Rye, Ltd., Folkestone	16,496
C. Jenner & Son, Ltd., Folkestone ...	16,293
Charles E. Sprinks & Sons, Hythe, Kent	15,962
William Dunk, Ltd., Folkestone	15,959
Norman O. Baker & Son, Folkestone ...	15,903
George Stone, Folkestone	15,692
J. J. Clayson & Son, Ltd., Lyminge, Folkestone	15,329
Emery & Mullett, Folkestone	14,990
J. J. Guy, Elham, nr. Canterbury ...	14,978
E. Charlier & Sons, Ltd., Hythe, Kent	14,910
Bowzell (Builders), Ltd., Deal	14,908
C. V. Buchan & Co., Ltd., Dover... ...	14,857
*Douglas Castle, Folkestone...	13,545

Faringdon.—Six houses at Uffington, for R.D.C. K. M. Hart, E. & S. Council Offices, London-st.: *H. J. Knapp & Sons, Stanford in the Vale, Faringdon, Berks, £8,472.

Gateshead.—Kitchen/dining-room at Redheugh School, for E.C. H. J. Cook, Chief A., Municipal-bldgs.: *M. S. Failes, Ltd., Westbourne-av., Gateshead, £10,448 (subject to M.E. approval).

Gateshead.—183 houses and 36 flats at Lyndhurst estate, for T.C. Plans by H. J. Cook, Chief A., Municipal-bldgs., Gateshead: *E. Jeffcock, Ltd., New Bridge-st., Newcastle-on-Tyne (51 houses); *J. Clark & Son, Ltd., Gregson-ter., New Seaham (54 houses and 36 flats); *A. V. Clerev & Sons, 14, Frederick-st., Sunderland (40 houses); and *J. H. Fisher & Co., Kenton-la., Newcastle-on-Tyne (38 houses). (All subject to M.H. approval.)

Glanford Brigg.—12 houses at South Killingholme, for R.D.C. Buttrick & Buttrick, architects, 43, Oswald-rd., Scunthorpe, Lincs: *F. R. Hepworth & Son, Goxhill, Barrow-on-Humber, Lincs.

Gosforth.—Garage and office for Gee, Sykes & Cook. Architects, L. J. Couves & Partners, Carliol House, Newcastle: *T. E. Ridley, 7, Moor-cres., Gosforth.

Greenock.—Suite of shops, etc., at Grieve-rd. site, for Corporation. R. L. Rankine, Architect and Master of Works, Municipal Offices, Wallace-sq., Greenock. Excavator, mason and brick works, etc.: *Robert Kirkwood, Greenock. Carpentry and Joinery works, etc.: *Direct Labour Dept. Slater and roughcasting works, etc.: *W. G. Bertram & Son. Plumber and sanitary engineering works, etc.: *John Pattison. Plaster and lathing works, etc.: *H. McCubbin. Electric lighting and fittings, etc.: *The Scottish Western Electrical Contractors, Ltd. Concrete flooring works, etc.: *Girlings Ferro-Concrete Co., Ltd. Glazing and allied works, etc.: *Direct Labour Dept. Asphalt roofing works, etc.: *The Scottish Speedwell Co., Ltd., Glasgow.

Ince-in-Makerfield.—Nursery School at Britannia Bridge, for Lancashire E.C. G. Noel Hill (F.), County A., County Offices, Fishergate-hill, Preston: *Thomas Collier & Sons, Ltd., Brown-st. Works, Leigh, £15,091.

Jarrow.—Factory for disabled persons. Architect, C. G. Errington, 46, Grainger-st., Newcastle: *D. Glen, Albert-rd., Jarrow.

Listowel.—10 houses at O'Connell's-ave., for U.D.C.: *M. A. Hannan, Listowel, £10,286.

Liverpool.—Alterations and additions to works at Kirkdale-rd. J. L. Griffiths, architect, 14, Castle-st.: *Fraser & Clayton, Sandy-rd., Waterloo, Liverpool 21.

Lleyn.—Six houses at Aberlaron site, for R.D.C. J. Egbert Griffiths (L.), 1, Bank-pl., Portmadoc: *G. L. Hughes, Llys Awel, Nevin, Caernarvon, £8,429.

L.C.C.—Contracts exceeding £2,500 in value placed by L.C.C. during period ended January 13:—Three blocks of dwellings and 26 perambulator sheds at Northwold Estate, Hackney, E. A. Russell, Ltd., E.17. Electrical installation at the Charles Dickens School, Southwark, Reliance Electrical Co., Ltd., Erith. War damage, etc., at Robert Montefiore School, Whitechapel and St. George's, Thomas Tierney & Co., Ltd., Millwall. Reconstruction after war damage and improvements of St. Clement Danes Grammar School, Hammersmith, H. Parfitt & Sons, Ltd., Wembley. Reinstatement of first and ground floors, etc., at Oldfield-rd. school, Stoke Newington, F. Troy & Co., Ltd., S.E.1. Three blocks of dwellings, and 33 perambulator sheds at Ocean estate, Bermondsey, J. Jarvis & Sons, Ltd., S.W.1. Construction of blocks of dwellings and 52 perambulator sheds at Woodberry Down estate, Stoke Newington, Tersons, Ltd., E.C.1. Erection of two blocks of dwellings, laundry, children's fitted playground and 15 perambulator sheds at Lewisham Hill estate, Tersons, Ltd., E.C.1. Construction of two blocks of dwellings and seven perambulator sheds at Berner estate, Stepney, A. T. Rowley (London), Ltd.

¶London (Admiralty). — *Chatham*: R.N. Barracks. Modernisation of seamen's quarters, Gough Cooper & Co., Ltd., Wilmington House, Wilmington, Kent.

¶London (Admiralty).—*Deal*: R.M. Depot. Modernisation of barracks, Gilbert Ash, Ltd., 2, Stanhope-gate, London, W.1. *R.N. Air Station, Abbotsinch*: Canteen, boiler-house and roads and paths, Wm. Gibson & Co. (Builders), Ltd., 11-25, St. James-st., Paisley, Renfrewshire.

¶London (Air Ministry).—Contracts to value of £500 or over for week ended January 15. Erection of hutting: Intrade, Ltd., Brentwood, Essex. Building work: Johnson & Bailey, Ltd., Cambridge. General maintenance work: W. Lawrence & Son, Ltd., Swaffham, Norfolk; A. Ross & Co., Westgate-on-Sea. Painting work: West Midland Erection Co., Ltd., Willenhall, Staffs; Clark & Fenn, Ltd., London, S.W.4.

¶London (M.O.W.).—Contracts placed by M.O.W. during week ended January 8:—

London: Post Office Depot, Cornwallis-rd., Canteen, McManus & Co., Ltd., Whetstone, N.20. *Angus*: Stracathro Dept. of Health Hospital, Angus, Int. and ext. painting, J. A. Brennen & Son, 33, Bridge-st., Montrose. *Devonshire*: M.O.W. Stores, Alphington-rd., Exeter, Eight Romney huts, Stephens & Son (1941), Ltd., Okehampton-st., Exeter. *Herefordshire*: Grammar School, Ross-on-Wye, Kitchen and dining-room, Foster & Dicksee, Ltd., James-st., Rugby. *Kent*: Hayes Primary School, George-la., Hayes, Kitchen and dining-room, Rush & Tompkins, Ltd., High-st., Footscray, Kent. *Lancs*: Collegiate School, Beach-av., Blackpool, Kitchen and dining-room, R. Fielding & Sons, Stanhope-rd., Blackpool; Highfield Boys' and Girls' School, Blackpool, Kitchen and dining-room, R. Fielding & Sons, Stanhope-rd., Blackpool. *Leics*: Overton-rd. School, Leicester, Kitchen and dining-room, A. Trees, Ltd., 216, Jarron-st., Leicester. *Middx*: Headstone Sen. School, Pinner-rd., North Harrow, Temporary school buildings, G. T. Crouch, Ltd., 3-5, Thames-st., Kingston-on-Thames; St. George's R.C. School, Gordon-rd., Enfield, Temporary school buildings, G. H. Miller & Co., Ltd., Sheridan Works, Thorpe-rd., Forest Gate, E.7. *Midlothian*: Bellvue Senior School, Edinburgh, Kitchen and dining-room, J. Best (Edinburgh), Ltd., Warriston House, Edinburgh. *Norfolk*: Forestry Commission, Denton Lodge, Feltwell, Traditional houses, Goddards of Thetford, Station-rd., Thetford. *Notts*: M/S R.O.F. and O.S.A.R.D., Ruddington, Ext. and int. painting, F. Labbett & Sons, 258, Derby-rd., Nottingham. *Peebles-shire*: E.V.W. Hostel, Victoria Park, Peebles, Repairs, adaptations and alterations, G. Rae & Co., Ltd., 4, Gayfield-sq., Edinburgh. *Staffs*: County Modern School, Bucknall, Stoke-on-Trent, Temp. school buildings, Tompkinson & Bettelly, Gower-st., Longton, Staffs. *Sussex*: E.V.W. Hostel, Grange-rd., St. Leonards-on-Sea, Adaptations, R. Corben & Son, Ltd., 2, Pelham-st., Hastings; Gravetye, nr. East Grinstead, Foresters' house, W. C. Hilton, 137, Western-rd., Haywards Heath. *Yorks*: M.H., Northfield-rd., Crookes, Alterations and additions, R. S. Hutchinson, Ltd., 430, London-rd., Sheffield; M.N.I., Manchester-rd., and Holehouse-la., Stocksbridge, New buildings, Walter Dunk & Sons, Ltd., Peel-st., Barnsley.

¶London (War Dept.).—Works contracts placed by War Dept. for week ended January 8:—

Co. Antrim: Miscellaneous work, Hugh McLaughlin & Sons, Whitehouse, Co. Antrim. *Co. Down*: Building work, R. D. Pollock & Co., Ltd., Bangor, Co. Down; Miscellaneous work, Henry Cole, Newry, Co. Down. *Lanarkshire*: Building work, James Barclay, Kilmarnock. *London, S.W.*: Miscellaneous work, Measures Bros. (1911), Ltd., London, E.C.1. *Monmouthshire*: Painting work, J. Hood, Caldicot, Mon. *Salop*: Building work, Wm. Browne & Son (Chester), Ltd., Chester. *Cornwall*: Miscellaneous work, Staverton Builders, Ltd., Totnes. *Wilts*: Painting work, The Decraspray Co. (Welling), Welling, Kent. *Durham*: Painting work, Oates Bros., Shipley, Yorks. *Yorks*: Miscellaneous work, Horace H. Brook (Contractors), Ltd., Sowerby Bridge. *Norfolk*: Miscellaneous work, Jermy & Moore, Norwich. *Suffolk*: Miscellaneous work, Henry Kent (Builders), Ltd., Bury St. Edmunds.

Manchester.—Alterations and additions to Christie Hospital and Holt Radium Institute, Wilmslow-rd., Withington, for Hospital Management Committee. H. S. Fairhurst & Sons (F.), Chancery-bldgs., 55, Brown-st.: *Wm. Thorpe & Son, Ltd., Chester-rd., Cornbrook, Manchester 16.

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Market Drayton.—Eight houses at Church-la. estate, for U.D.C. J. G. Bailey, M.S.I.A., S., Town Hall: *T. Healey & Sons, Shropshire-st., Market Drayton, Salop, £9,020.

Mitford and Launditch.—Seven pairs of houses and 2 pairs of bungalows at various sites, for R.D.C. Harold Marsh, F.I.A.S. (L.), 4a, Market-pl., East Dereham. Gt. Dunham, 4 pairs houses: *D. Lancaster, 29, Heartsease-la., Norwich, £11,037. Littleshall, 3 pairs houses, 1 pair bungalows: *A. J. L. Boddy, Castle-acre, King's Lynn, £10,437. Weasenham, 1 pair of bungalows: *Allnatts (London), Ltd., Cattle Market-st., Fakenham, £1,910.

Newcastle-on-Tyne.—Conversion of premises at Market-st. into offices, for Rock Building Society: *Stephen Easten, Ltd., Westgate Grange, Newcastle-on-Tyne.

North Kesteven.—10 houses at various sites, for R.D.C. J. Chadwick, S., Council Offices, 31, Clasketgate, Lincoln: *Wiles & Chapman, Dunholme, £12,871.

Portsmouth.—Workshops, caretaker's lodge, gas meter house, site works and services comprising Stage 1 of Technical College Annexe, Anglesea-rd., for T.C. City A., Municipal Offices: *Hawkins Bros. (Gosport), Ltd., 126-130, Forton-rd., Gosport, £73,899.

St. Albans.—14 houses at St. Julian's estate, for T.C. City E. & S., 16, St. Peter's-st.: *Davis & Rentoul, Victoria-st., St. Albans, £17,042.

St. Austell.—Ten houses at Poltair, for U.D.C. H. G. King, A.M.I.C.E., A.M.I.Mun.E., E. & S., Municipal Offices. *Facey, Lobb & Roberts, Ltd., Valley-rd., Mevagissey.

Salford.—Office block to factory at Ordsall-la., for Richard Haworth, Ltd. H. S. Fairhurst & Sons (F.), Chancery-bldgs., 55, Brown-st., Manchester 2: *J. Gerrard & Sons, Ltd., Pendlebury-rd., Swinton, Manchester: steelwork: *Twisteel Reinforcement, Ltd., 7, Oxford-rd., Manchester 1.

Saltash.—Two blocks of four Duplex flats at Cowdray site, St. Stephen's-rd., for T.C. B.S. Quantities by Fleetwood Eversden & Partners, *Geo. H. Webber, Ltd., Saltash, £5,974.

Scarborough.—Alterations and adaptations to old hospital buildings, for conversion into school clinic, for North Riding C.C. J. Catchpole (A.), County A., County-bldgs., Northallerton: *Plaxton (Scarborough), Ltd., Seamer-rd. Works, Scarborough, £4,081.

Sheffield.—Works for T.C. W. George Davies (F.), City A., Town Hall. 78 houses at Norton estate: *Edmund Oxley (Contractors), Ltd., 44, Greenhill-rd., Woodseats, £106,227; 32 houses at Clifton estate: *Melling Bros., Ltd., Balfour-rd., Attercliffe, £41,376 (all of Sheffield).

Solihull.—Extensions to County School, Lode-la. North, for Warwickshire E.C. C. H. Elkins (F.), County A., Shirehall, Warwick: *Bragg Bros., Ltd., Church Hill-rd., Solihull, Birmingham, £51,600.

Stretford.—Offices, canteen, dressing-rooms, etc., to factory at Park-rd., for Kellogg Co. of Great Britain, Ltd. Plans by own staff: *Stephen Weaver Construction Co., Ltd., London.

Sunderland.—12 Haig Homes at Hill View estate, for Haig Homes and Sunderland Mayor's Welcome Home Fund. Architect, L. C. Powell, Chesham, Bucks: *L. W. Evans (Contractors), Ltd., Norfolk-st., Sunderland.

Tees-side.—New power station for Electricity Board. Architects, L. J. Couves & Partners, Carliol House, Newcastle: *Sir Robert McAlpine & Sons, Ltd., 62, Park-la., London, W.

Torquay.—16 old people's dwellings on Watcombe housing estate, for T.C. B.S. *John Lloyd, Lower Ellacombe Church-rd., Torquay, £14,139.

Warrington.—20 houses at Poplars-av. estate, for T.C. J. Y. Hughes, M.Inst.C.E., B.S., Municipal-bldgs., Bank Park: *Osborne & Co. (Warrington), Ltd., Thelwall New-rd., Grappenhall, Warrington, £34,658.

Australian Building Documents.

The Department of Works and Housing of the Commonwealth Experimental Building Station, Sydney, Australia, have issued documents on "Climate and House Design, Thermal Characteristics of Dwellings" (No. 27); "Sunshine and Shade in Australasia" (No. 23); and "Earth Wall Construction, Stabilised Earth" (No. 19).

Corporation Rents in Bradford.

Bradford Corporation Housing Committee have re-appointed a sub-committee to consider the revision of Corporation house rents in order to secure an equalisation of rents as between the 10,000 pre-war houses and the 2,500 post-war houses expected to be built by 1954. The weekly rent for a three-bedroom pre-war house is 6s. 5d. and 14s. 6d. for a similar post-war type which, however, is bigger and has additional amenities.

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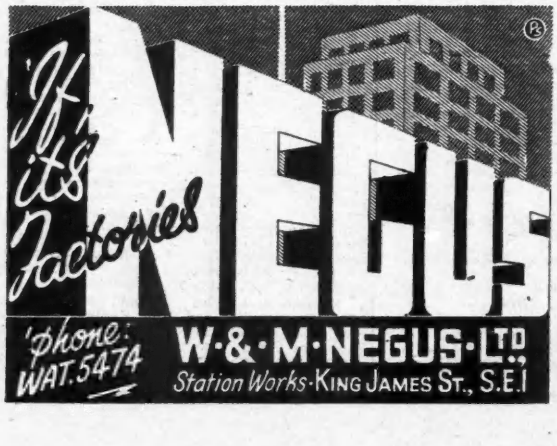

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